US700
Time & Attendance
and
Access Control Terminal

User Guide

About this Guide

This guide provides User instructions only. For information regarding actual installation, refer to the US700 Installation Guide.

User Guide Disclaimer

All functions described in this document are current as of April, 2008. However, since the US700 is always being improved upon, it is remotely possible that this document may not coincide exactly with the US700 you have purchased. Every effort has been made to ensure the information in this document is complete and consistent with the US700 you have purchased. ZK Software will not assume liability for any direct or indirect financial loss resulting from any inaccuracies or omissions found in this document.

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I. Considerations

A. Time and Attendance Software

The US700 runs ZK time and attendance software in addition to numerous 3rd party time and attendance software applications. We strongly recommend that you consult with your local ZK software office to determine which time and attendance software application is suitable for your specific needs. (www.zk-usa.com)

B. Environmental Factors

In order for your US700 to function properly, it must be installed in an adequate, environmental location. There are certain environmental factors that need to be taken into consideration.

Primarily, the US700 was designed for indoor usage. We strongly recommend not installing or operating your US700 in areas where bright light is present. Bright light will cause deficiencies in the sensor's ability to accurately read fingerprints. However, if you need to install your US700 outdoors, you can protect it with an all-weather protective covering. These outdoor enclosures are manufactured by STI USA and can be purchased by going to their website as directed. (www.sti-usa.com)

The proper functioning temperature range to use your US700 in is 0° to 40° C (32° to 105° F). Usage of your US700 in hot environments can cause your US700 to overheat. Therefore, placing it in environments where there is adequate air ventilation can inhibit overheating.

II. Abbreviate Operating Procedures

Below is a brief overview on setting up your US700. We recommend that you follow these steps.

STEP 1
Install your US700and power it up.

STEP 2
Enroll users by registering their fingerprint(s) or password.

STEP 3
After enrolling users, ensure the US700 recognizes their enrolled fingerprint(s) and/or password. Verifying this information is important.

STEP 4
Configure the US700 communication settings and download the user's newly enrolled fingerprint(s) from the US700 onto the computer. This data can be transmitted via TCP/IP.

Note: It is imperative to create backup fingerprint templates and save them onto a computer or a USB flash drive. If the US700 was vandalized or malfunctioned, having these backup templates eliminates the re-enrollment process of users.

STEP 5
Verify that the US700 displays the correct date and time.

III. Introducing Fingerprint(s) Recognition Technology

Prior to using your US700, it is essential to understand how fingerprint recognition technology works. Once a thorough understanding of fingerprint recognition technology is obtained, you will have a positive experience with your US700.

A. How F.R.T. Works

Adding and verifying fingerprints is a vital function of the US700 but only equates to a small fraction of its capabilities.

When a user places their finger on a fingerprint recognition device for the first time (ie US700), the fingerprint is scanned and converted into a computer generated biometric template. Each individual template can only be recognized by its respective manufactured biometric device. This is due to each fingerprint containing a distinctive amount of unique physical characteristics called minutiae. Minutia includes definite visible aspects of fingerprints such as ridges, ridge endings and bifurcation (forking) of

ridges. Most minutiae are found in the core points of fingerprints located near the center on the fleshy pad of the finger.

Something we must note here is that each template is not an actual fingerprint image. This feature not only prevents duplicate fingerprints from being enrolled but also prevents the generation of duplicate templates.

Below in Figure A-1 are clear depictions of minutiae. The red dots represent core points located on your finger. A core point is the topmost point on the innermost upward recurring ridge line.

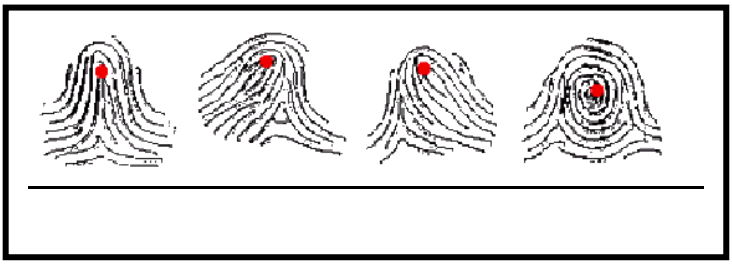


Figure A-1

Note: If this manual is printed in black and white, a dot will be visible within the ridges.

During the enrollment process, the user places their finger on the US700 sensor which takes a picture of the user's minutiae points. The US700 uses proprietary mathematical algorithms to convert the image into a unique mathematical template. This template becomes encrypted and is stored in the US700 database.

Each time a user's fingerprint is scanned, the US700 searches its database for a matching fingerprint. If the US700 matches a user's fingerprint, their attendance is recorded in the audit log which can be noted on subsequent reports.

Note: Security issues should never be a concern when using the US700. No real image of the user's fingerprint(s) is stored in the device. Only the minutiae-based templates are stored.

B. Getting Good Fingerprint Images

The quality of fingerprint images is comparable to the amount of minutiae points acquired by the US700 sensor. Fingerprint images that do not possess a sufficient amount of minutiae points may be indecipherable. We advise those users whose fingerprint images cannot be read by the sensor to create a password.

Below in Figure A-2 shows examples of inadequate fingerprints. These are examples of smudged, faded or distorted areas on the fingerprint. These conditions are incurred by excessive dryness, wetness, scarring and the application of insufficient pressure of the skin at the fingertip.

Figure A-2

The fingerprint matching algorithm is capable of extracting the correct minutiae without visibly seeing a perfect print. However, the positioning of the finger, the moisture and pressure is imperative when placing it on the sensor. These are major contributing factors in achieving a consistent fingerprint match.

C. Correcting Wet/Dry Fingerprint Images

After washing your hands or when temperatures or rigid, your fingers tend to be dry. In this case, the user should moisturize their finger(s) simply by breathing on the fleshy pad of their fingertip before placing it on the sensor. The moisture from their breath is transferred to the finger(s) which should help improve their recognition.

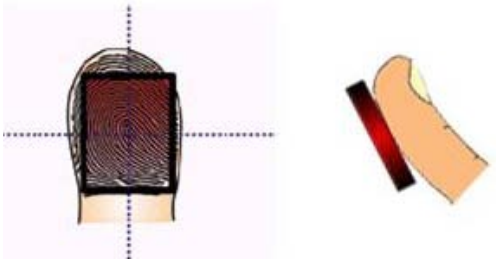
If the fingerprint is too wet, the ridges and valleys are rendered indistinguishable. The lack of recognizable minutiae causes wet fingerprints to be rejected. A quick resolution to this problem is simply swiping the finger on a clean dry towel or cloth.

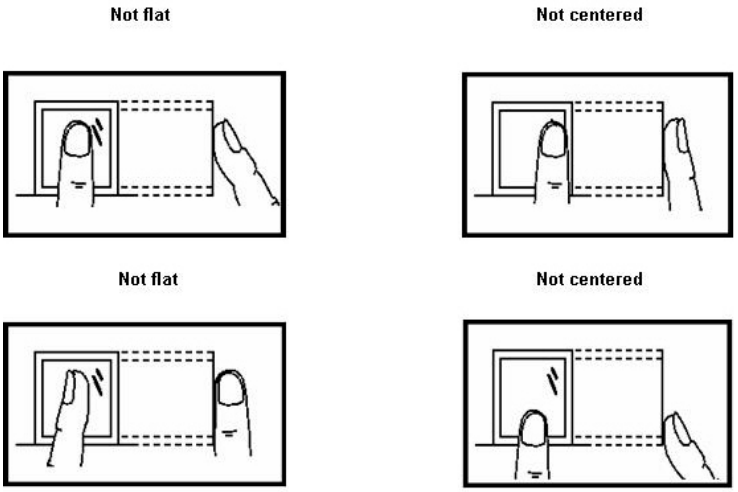
D. How Much Pressure Required for Good Fingerprint

When too much pressure is applied on the sensor, ridges will appear too close together, creating an indistinguishable image. In addition, too much pressure generates blurred images which the sensor cannot identify.
If minimal pressure is applied, the sensor will not read the fingerprint.

It is crucial for your finger to cover the majority of the sensor and maintain contact with it for two full seconds. When you hear your US700 beep, it is an indicator that it has sensed your finger, prompting you to continue the enrollment process.

Practicing applying pressure to the sensor will increase the chances of your fingerprint being readable. Once you have a better idea of how much pressure to use, enrolling users should not be a concern. Below is an illustration displaying how to properly place your finger on the sensor.





E. Identity Verification

The US700 will not record employee attendance until an individual's identity is verified. There are two ways for the US700 to verify a user's identity: fingerprint matching and password matching.

F. Fingerprint/Password Matching

The US700 supports two methods of fingerprint matching: 1:N and 1:1.

1:N fingerprint matching, or 1 touch matching, is a fast and easy method. It will match a user's fingerprint(s) to all templates in the US700 database. With this type of matching, a user does not have to enter in their user ID prior to placing their finger on the sensor.

1:1 fingerprint matching can be used when too many users fingerprints are not easily recognized. This will require a user to enter in their user ID number before verifying themselves with a fingerprint.

Password matching is utilized when too many users have difficulty with the fingerprint matching process. Here a user can register with a four digit password to access the device.

G. Door Access Considerations

The US700 is designed to work as an access control terminal and time and attendance recorder. Door access control decisions are based upon who the user is and when the user is permitted door access.

The US700 will verify a user but a user gains door access either by the US700 or a 3rd party access control panel. If the US700 validates a user's identity and determines if the user is permitted door access at that particular time, the door will open. If the US700 verifies a user's identity but does not permit door access to the user at that time, the door will not open.

IV. User Management

A. Brief Overview of Enrollment/Verification Process

This section provides a brief overview of enrolling various types of users and the security process used to prevent false identification.

B. User Enrollment/Verification

Enrollment is a process that associates an ID number to a user's finger to create a template. This template is stored in the US700's memory for future verification.

During user verification, the stored template is compared to a current fingerprint scan to confirm a user's identity. (This process should approximately take 2-4 seconds). Up to ten fingers can be enrolled for one ID number so a user may have more verification options.

We strongly advise enrolling one finger from each hand in case of a hand injury. A user can use a finger from the uninjured hand as backup. We suggest enrolling either index fingers and/or middle fingers.

For users with extremely thin fingers, we recommend enrolling the thumb. For users whose fingers are difficult to enroll or cannot be enrolled, we advise enrolling a password with your fingerprint(s).

C. Match Threshold Levels

The match threshold is an extensive verification process performed to ensure users are who they claim to be.

The match threshold levels establish a balance between false acceptance rate (FAR) and false rejection rate (FRR). FAR measures how often a non-authorized user is falsely recognized and granted access to the system. FRR measures how often an enrolled and authorized user is denied access to system because the system did not recognize them.

Note: You cannot set match threshold levels on a per user basis. The threshold setting is universal for the user population.

If too many users are experiencing difficulty having their fingerprint(s) read, we recommend using 1:1 matching (i.e. User first enters their User ID, and then places their finger on the sensor for verification).

Raising the threshold increases security while lowering decreases it. You need to strike a correct balance based upon the quality of user fingerprints.

If too many users are experiencing fingerprint recognition difficulties, the match threshold level can and should be reduced.

Table **1—1** Suggested Match Threshold Settings

FRR	FAR	One-to-many	One-to-one
High	Low	45	25

Middle	Middle	35	15
Low	High	25	10

D. User ID Numbers

Fingerprints are assigned a unique user ID number which refer to fingerprint templates in the US700 database.

E. Authority Levels

The US700has four authority levels:

1. **Users**
   People whose identity must be verified prior to having their attendance recorded. Users have no administrative privileges.

2. **Enrollers**
   People who have authorization to enroll or delete users from the system.

3. **Administrator**
   People who can perform other operations except set advanced options and enroll administrators.

4. **Supervisors**
   People who have access to **ALL** functions.

Note:
Until a supervisor is enrolled in the system, any user can access the Menu system.

F. Start-up window

In order for your start up window to appear, plug in the power adaptor to the main power supply.

If the start up window is still not visible, press the power button to turn on your US700.

Note:

The actual current date/time will appear.

V. Enrollment and Verification Procedures

This section describes how to enroll and verify users. Some US700 models can also enroll/verify Prox, HID and Mifare cards (aka PIN/FP cards).

Note:

You must have an administrative role, favorably a supervisor, enrolled in the US700 to prevent users from accessing the main menu. Until this occurs, all users have access to menu functions.

The user management menu allows you to enroll/delete users and their respective fingerprint(s) and password.

Enroll User

Enroll fingerprint(s)
Enroll Password
Enroll Fingerprint(s) and Password

Enroll Admin

Enroll fingerprint(s)
Enroll Password
Enroll Fingerprint(s) and Password

Card Enrollment

Delete

A. User Enrollment

The first enrolled in the US700 will be capable of enrolling other users until an administrator role is enrolled. Therefore, administrative enrollment after installation is vital.

There are three types of enrollment:

1. Fingerprint enrollment
2. Password enrollment
3. Fingerprint & password enrollment

The enrollment type selected depends on the environment and how easily users fingerprint(s) can be read by the US700

Fingerprint enrollment: should be used when the majority of users fingerprint(s) can be read. This is typical for most office environments.

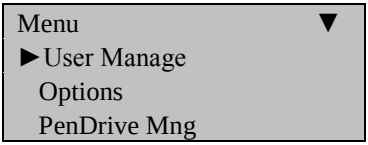
Password enrollment: should be used for users whose fingerprint(s) cannot be enrolled or verified. It is not unusual to have some users experience fingerprint verification difficulties.

Fingerprint & Password: this type of enrollment allows users to register both fingerprint(s) and password.

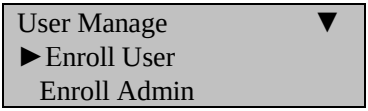
a. Fingerprint Enrollment

To start fingerprint enrollment, press menu.

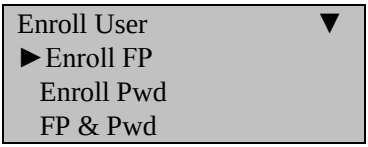
Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.



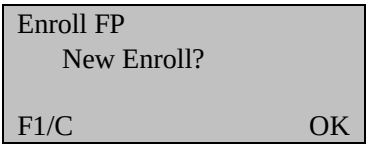
Place the cursor (►) beside enroll user and press OK. The enroll user menu will appear.



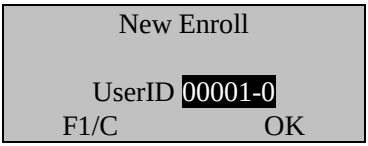
Place the cursor (►) beside enroll FP and press OK..



The US700 will prompt you for a new enroll. If a new user, press OK.



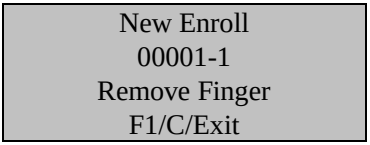
The US700 will provide you with the next available user ID.



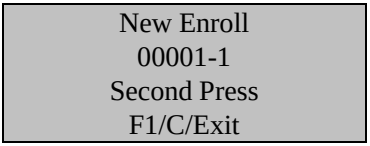
In this example, no user has been enrolled on the US700 so the next available user ID is 00001. Press OK to accept 00001, or manually key in a different number if desired.

The US700 will prompt you to place your finger on the sensor. Remember, you must leave your finger on the sensor for two seconds.

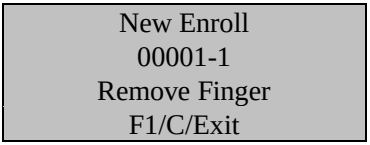
After the US700 successfully scans your fingerprint, it will beep and briefly prompt you to remove your finger.



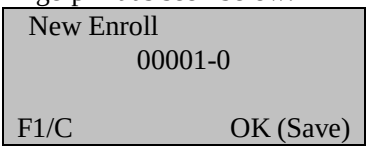
Then you will be prompted to do a second press.



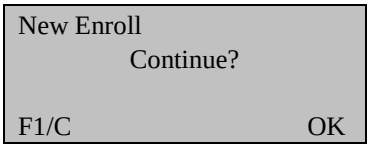
Place your finger on the sensor for a 2nd time. Again, you will be prompted to remove your finger.



Place your finger on the sensor for a 3rd and final time. After your fingerprint has been scanned, you will be prompted to save your fingerprint as seen below.

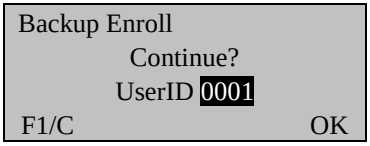


Press OK to accept the newly enrolled finger. The US700 will prompt you to continue.



If you want to enroll additional users, press OK and follow the same procedures.

If you are finished enrolling additional users, press F1/C to exit. You will be prompted to enroll a backup finger as seen below.

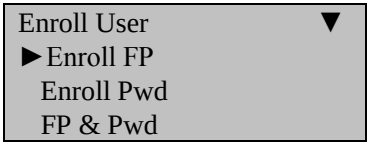


If you wish to enroll a backup finger for user ID 00001, press OK to proceed with the process. If not, press F1/C one more time to return to the enroll user menu.

Note:

We recommend enrolling one finger from each hand in case of a hand injury. Enrolling either index and/or middle fingers is highly recommended.

After enrolling one or more fingerprint(s) for user ID 00001 press F1/C to exit. You will be redirect to the enroll user menu.



Press F1/C three additional times to return to the start up window.

Welcome Check-In
HH:MM
MM/DD/YY DAY

Test the newly enrolled fingerprint(s) by having user ID 0001 place their finger on the sensor.

If successful, the US700 will respond with an audible *thank you* and the following screen will appear.

Verify

Pin: 00001
Verified.

Note:

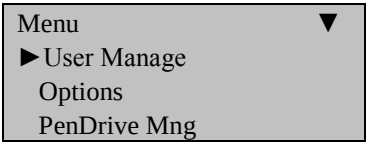
The US700 will verify that user ID 0001 accessed the system and record it in its transaction log. This information can be used for time & attendance software applications.

b. Password Enrollment

Password enrollment should be used for users whose fingerprint(s) cannot be read by the sensor.

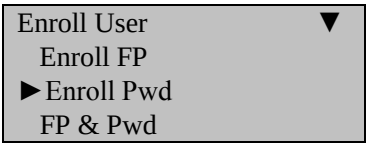
To start password enrollment, press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.

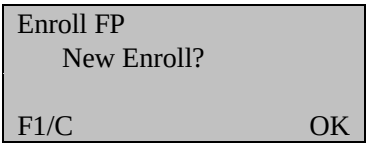


Place the cursor (►) beside enroll user and press OK.

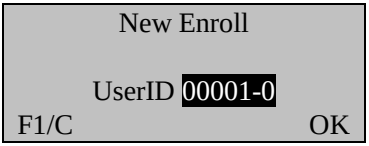
The enroll user menu will appear. Place the cursor (►) beside enroll pwd and press OK.



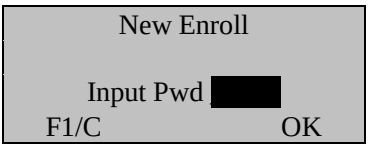
The US700 will prompt you for a new enroll. Press OK to confirm.



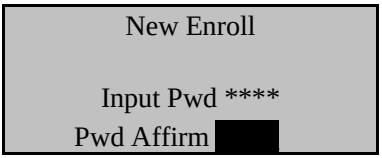
The US700 will prompt you with the next available user ID. If you wish to use a different number, you can manually enter it.



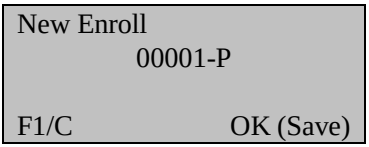
The US700 will prompt you for a four digit password.



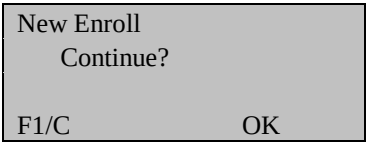
Enter a four digit password and press OK. The US700 will prompt you to re-enter your password.



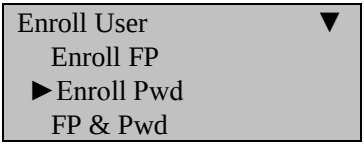
Again, enter in your four digit password and press OK. The US700 will prompt you to save your password.



Press OK to confirm new password or F1/C to cancel.



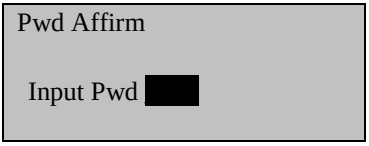
The US700 will prompt you to continue the password enrollment process. If you wish to continue enrolling additional users, press OK and follow the same procedures. If you wish to exit, press F1/C twice to return to the enroll user menu.



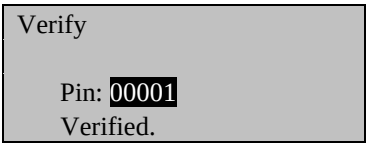
Press F1/C three additional times to return to the start up window.

Now have the newly enrolled user test their password. At the start-up window, have the user enter their user ID number and press OK.

The US700 will prompt the user for their four digit password. Enter in the four digit password and press OK.



If successful, the US700 will respond with an audible *thank you* and the following screen will appear.



c. Fingerprint and Password Enrollment

This option enables users to enroll both a password and fingerprint in one step.

To start fingerprint and password enrollment, press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.

```
Menu                    ▼
►User Manage
  Options
  PenDrive Mng
```

Place the cursor (►) beside enroll user and press OK.

```
User Manage             ▼
►Enroll User
  Enroll Admin
```

The enroll user menu will appear. Place the cursor (►) beside fp & pwd and press OK.

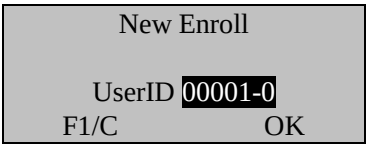
```
Enroll User             ▼
  Enroll FP
  Enroll Pwd
►FP & Pwd
```

The US700 will prompt you for a new enroll and press OK to confirm.

```
FP & Pwd
        New Enroll?

F1/C                    OK
```

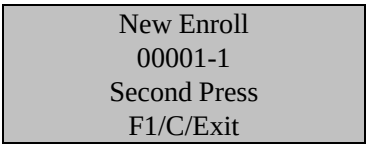
The US700 will provide you with the next available user ID. If you wish to use a different number, you can manually enter it.



The US700 will prompt you to place your finger on the sensor. Place and hold your finger on the sensor for two seconds.

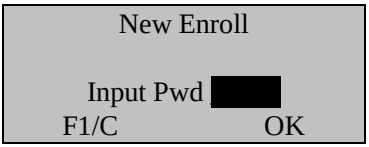
After the US700 successfully scans your fingerprint, it will beep.

You will be prompted to remove your finger, and place your finger on the sensor a 2nd time.

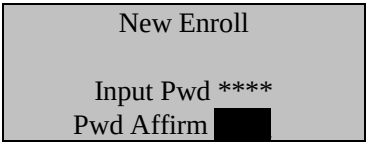


Remove your finger, and then place your finger on the sensor for a 3rd and final time.

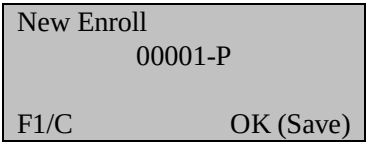
After removing your finger, the US700 will prompt you for a four digit password.



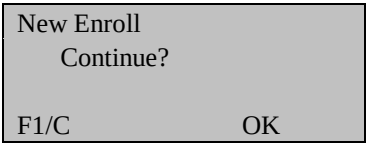
Enter a four digit password and press OK. The US700 will prompt you to re-enter your four digit password.



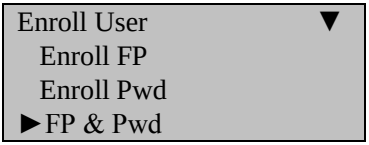
Again, enter your four digit password and press OK. The US700 will prompt you to save your password.



Press OK to save your password or press F1/C to cancel. The US700 will prompt you to proceed with the enrollment process.



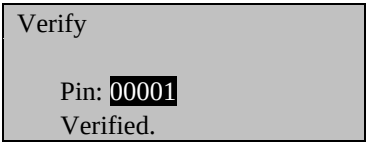
If you would like to enroll additional users, press OK, if not press F1/C twice to exit and return to the enroll user menu.



Press F1/C three additional times to return to the start up window.

Now, the user must test the newly enrolled fingerprint(s) and password.

If successful, the US700 will respond with an audible *thank you* and the following screen will appear.



B. Administrator Enrollment

There are three types of administrator users that can be enrolled in the US700.

Enrollers:
People who are only authorized to enroll or delete users.

Administrators:
People who can perform other operations, except set advanced options and enroll administrators.

Supervisors:
People who have access to **ALL** functions.

Administrators can enroll with three methods

- **Fingerprint**

- **Password**
- **Fingerprint and Password**

a. Fingerprint Enrollment

Press menu.

Use the scroll▲/▼ keys and place the cursor (►) beside user manage and press OK.

Menu	▼
►User Manage	
Options	
PenDrive Mng	

Place the cursor (►) beside enroll admin and press OK.

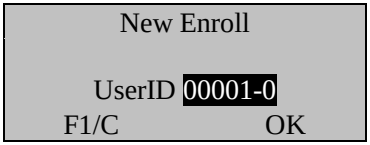
User Manage	▼
Enroll User	
►Enroll Admin	

Place the cursor (►) beside enroll FP and press OK.

Enroll Admin	▼
►Enroll FP	
Enroll Pwd	
FP & Pwd	

The US700 will prompt you to select an admin type.

Use the scroll keys to select supervisor and press OK. The US700 will provide you with the next available user ID.

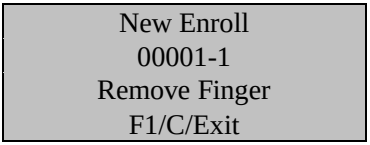


Press OK to accept 00001 or manually key in a different number if desired.

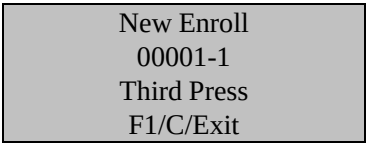
The US700 will prompt you to place your finger on the sensor. Place your finger on the sensor for a full two seconds.

After the US700 successfully scans your fingerprint, it will beep.

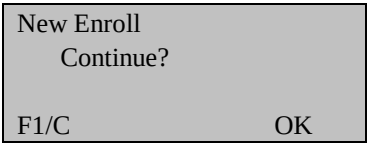
Place your finger on the sensor for a 2nd time. Again, you will be prompted to remove your finger.



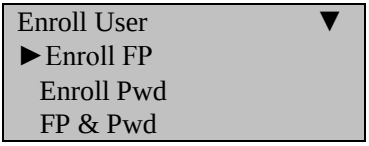
Remove your finger, and then place your finger on the sensor for a 3rd and final time.



The US700 will prompt you to continue with the enrollment.



If you wish to continue enrolling additional administrators, press OK to continue. If you are finished, press F1/C twice to return the enroll user menu.



Press F1/C three additional times to return to the start up window.

Now test the newly enrolled user's fingerprint(s). If successful, the US700 will respond with an audible *thank you* and the following screen will appear below.

```
Verify

    Pin: 00001
    Verified.
```

b. Password Enrollment

Password Enrollment should be used for those administrators whose fingerprint(s) cannot be read by the T4/A10/X628/B1's sensor.

Press menu.

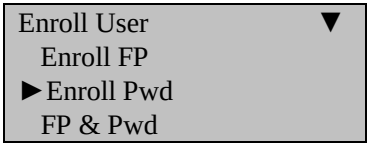
Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.

```
Menu                    ▼
►User Manage
  Options
  PenDrive Mng
```

Place the cursor (►) beside enroll admin and press OK.

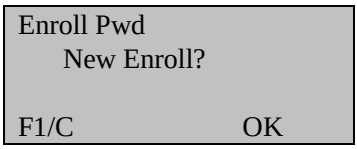
```
User Manage             ▼
  Enroll User
►Enroll Admin
```

Place the cursor (►) beside enroll pwd and press OK.

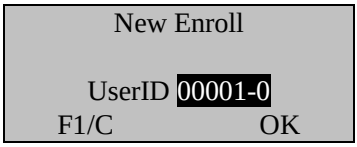


The US700will prompt you to select an admin type.

Use the scroll ▲/▼ keys to choose the admin type you are enrolling and press OK to proceed.

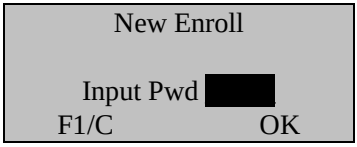


The US700 will provide you with the next available User ID.

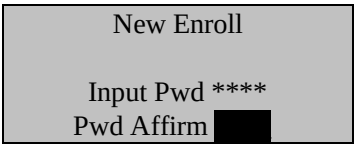


Press OK to accept 00001 or manually key in a different number if desired.

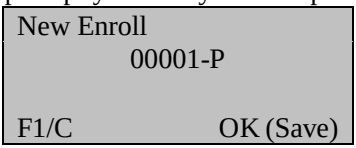
The US700will then prompt you to enter a four digit password.



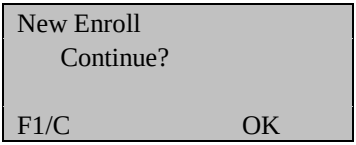
Input a four digit password and press OK. The US700 will prompt you to re-enter your password.



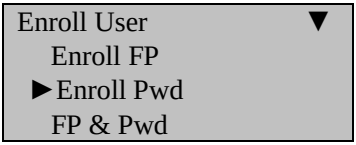
Re-enter the same four digit password and press OK. The US700 will then prompt you save your new password. Press OK to confirm.



The US700 will prompt you to continue with the enrollment process.

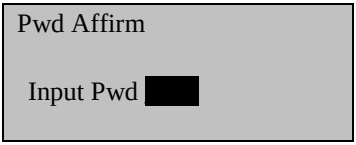


If you would like to enroll additional users, press OK to continue. If you are finished enrolling users, press F1/C twice to exit and return to the enroll user menu.

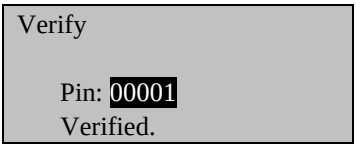


Press F1/C three additional times to return to the start up window.

Now test the newly enrolled password. Have the newly enrolled user enter in their ID number and press OK. The US700 should prompt you for the four digit password.



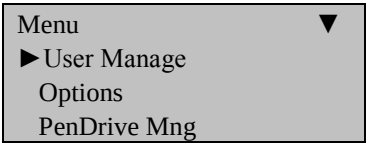
Enter the four digit password and press OK. If successful, the US700 will respond with an audible *thank you* and the following screen will appear.



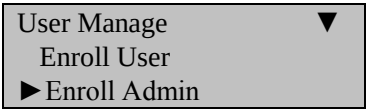
c. Fingerprint and Password Enrollment

Press menu.

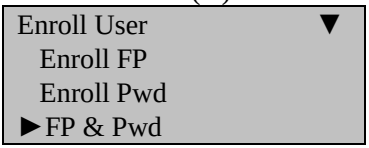
Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.



Place the cursor (►) beside enroll admin and press OK.

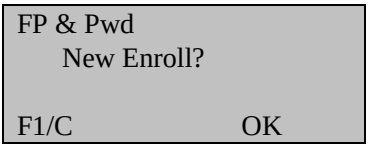


Place the cursor (►) beside FP & Pwd and press OK.

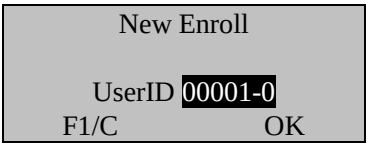


The US700 will prompt you to select an administrator type. Use the scroll keys to choose an administrator type and press OK.

The US700 will prompt you for a new enroll. Press OK to continue.



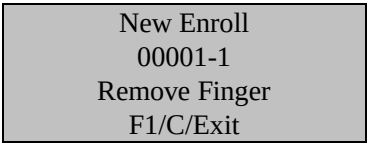
The US700 will provide you with the next available User ID number. If you would like to use a different number, you can manually enter it. Press OK.



The US700 will prompt you to place your finger on the sensor. Place your finger on the sensor for a full two seconds.

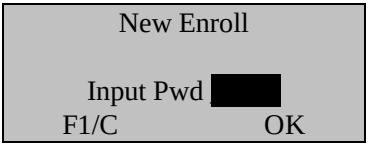
After the US700 successfully scans your fingerprint, it will beep and prompt you to remove your finger.

Place your finger on the sensor for a 2nd time. Again, you will be prompted to remove your finger.

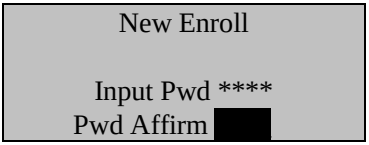


Remove your finger, and then place your finger on the sensor for a 3rd and final time.

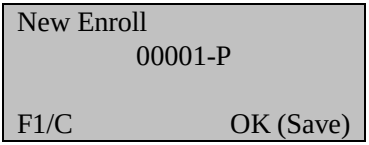
Remove your finger and you will then be prompted to input a password.



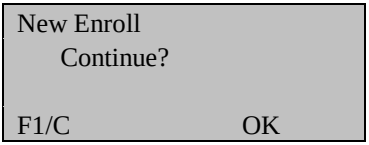
Enter a four digit password and press OK. The US700 will prompt you to re-enter your four digit password.



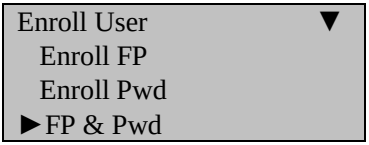
Re-enter your password and press OK. The US700 will prompt you to save your data.



Press OK to confirm your password or press F1/C to cancel. Then the US700 will prompt you to continue with the enrollment process.

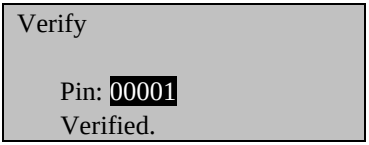


If you would like to enroll additional administrators, press OK to continue. If you are finished enrolling additional administrators, press F1/C twice to exit and return to the enroll user menu.

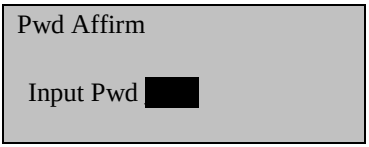


Press F1/C three additional times to return to the start up window.

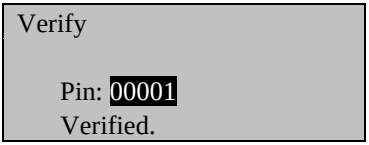
Now have the newly enrolled user test their fingerprint. If successful, the US700 will respond with an audible *thank you* and the following screen will appear.



Next, test the newly enrolled password. Enter the user ID number and press OK. The US700 will prompt you to enter your four digit password.



Enter the four digit password and press OK. If successful, the US700 will respond with an audible *thank you* and the following screen will appear.



C. Card Enrollment

Some US700 models have an internal card reader and a fingerprint sensor. The US700 has an option of having an internal proximity card reader, HID reader or Mifare reader.

Card readers are helpful for users whose fingerprints cannot be read by the fingerprint sensor. Mifare readers are helpful for customers who prefer to have their templates stored on cards instead of storing fingerprint templates in the reader.

a. Proximity/PIN Card Enrollment

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.

```
Menu                    ▼
►User Manage
  Options
  PenDrive Mng
```

Place the cursor (►) beside FPCard Mng and press OK.

```
User Manage             ▼
  Enroll User
►FPCard Mng
  Enroll Admin
```

The US700 will prompt you with three enrollment types as seen below.

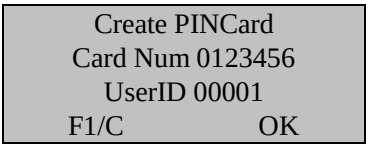
```
FPCard Mng              ▼
 ►Create PINCard
  Enroll FPCard
  Create FPCard
```

Place the cursor (►) beside create PINCard and press OK. The US700 will provide you with a user ID. Press OK to continue.

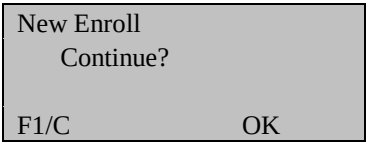
```
      Create PINCard

      UserID 00001
   F1/C          OK
```

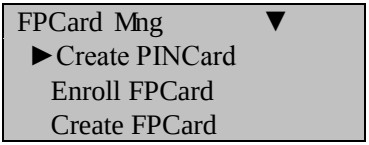
Then you will be prompted to show your card over the reader. Flash your card over the reader until you see the card number shown.



If the card number is valid, press OK to confirm or press F1/C to cancel. Then the US700 will prompt you to continue with the enrollment process.



If you would like to enroll additional card users, press OK to continue. If you are finished enrolling users, press F1/C twice to exit and return to the fpcard mng menu.



Press F1/C three additional times to return to the start up window.

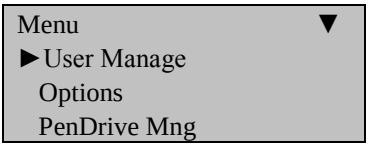
D. Deleting Enrolled Users

You can delete fingerprints, passwords or an entire user. Deleting unused templates makes room for new ones. It is imperative to delete user information when:

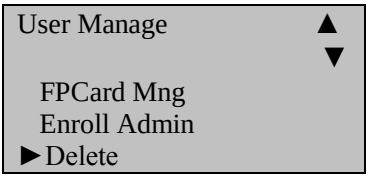
- A user's fingerprint(s) is no longer recognized (possibly caused by injury) or their password has been forgotten.
- The user is no longer employed and their fingerprint(s)/ password and information need to be deleted for security purposes.

To perform deletion, press menu.

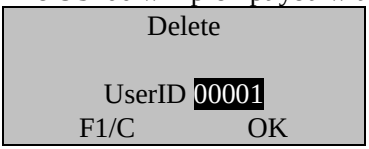
Use the scroll ▲/▼ keys and place the cursor (►) beside user manage and press OK.



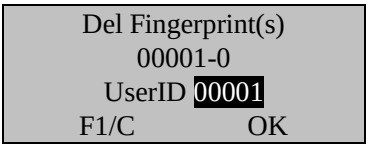
Place the cursor (►) beside delete and press OK.



The US700 will prompt you with the delete menu.

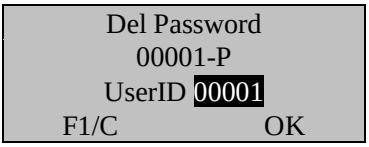


Enter the user's ID you wish to delete and press OK. Next, the US700 will prompt to confirm the user's ID you would like to delete and press OK.

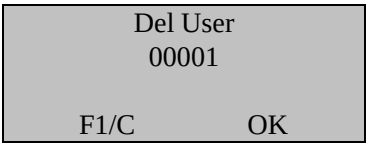


If the user has additional fingerprints enrolled, the US700 will prompt you with the choice of deleting each enrolled fingerprint (i.e. 00001-1, 00001-2, etc).

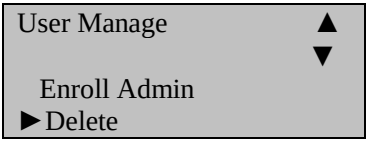
If a user has a password enrolled, the US700 will prompt you to delete the password. Press OK to delete password.



The US700 will prompt you for a final time that the user you want to delete is correct. If it is correct, press OK to confirm deletion. If you wish to cancel deletion, press F1/C.



You will be redirected to the user manage menu.



Press F1/C two additional times to return to the start-up window.

Welcome Check-In HH:MM MM/DD/YY DAY

VI. Changing Date and Time

Press menu.

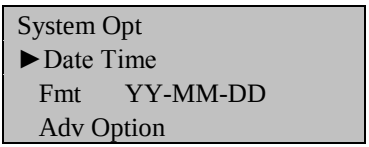
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼ User Manage ►Options PenDrive Mng

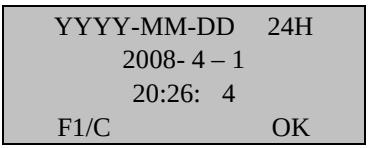
The options menu will appear.

Options ▼ ►System Opt Power Mng Comm Opt

Place the cursor (►) beside system option and press OK. The system option menu will appear.



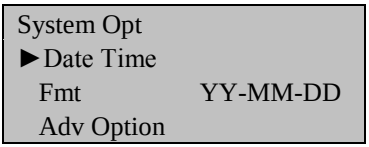
Place the cursor (►) beside date time and press OK. The following screen will appear.



Use the ▲/▼ keys to change between the year, month, day or time data fields. Use the keypad to change the value.

Note:
Time is in military (24-hour) format.

Press OK to accept changes or F1/C to cancel and return to the sys opt menu.



Press F1/C three additional times to return to the Start-Up window.

VII. Changing Date Format

The following date formats are available:

YY.MM.DD	MM-DD-YY	MM/DD/YY
MM.DD.YY	DD-MM-YY	DD/MM/YY
DD.MM.YY	YYYYMMDD	

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
  User Manage
►Options
  PenDrive Mng
```

The options menu will appear.

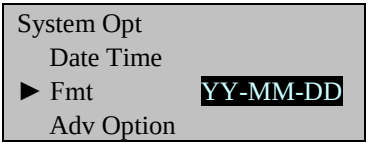
```
Options                 ▼
►System Opt
  Power Mng
  Comm Opt
```

Place the cursor (►) beside system opt and press OK. The system options menu will appear.

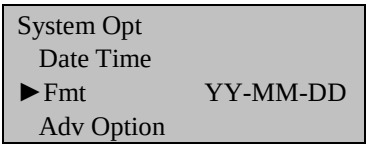
```
System Opt
  Date Time
►Fmt              YY-MM-DD
  Adv Option
```

Place the cursor (►) beside fmt and press OK.

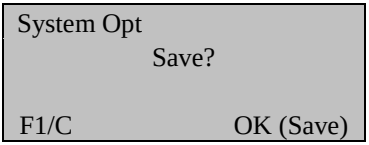
Note the YY-MM-DD becomes highlighted and will allow you to change the format.



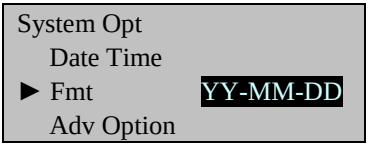
Use the scroll ▲/▼ keys to change the date format and press OK to confirm changes. Notice that the YY-MM-DD will no longer be highlighted.



Press F1/C to exit; the US700 will prompt you to save your changes.



Press OK to accept changes or F1/C to cancel and return to the system options menu.



Press F1/C three additional times to return to the start up window.

VIII. Advanced Settings

Below are a list of available advanced settings and their options.

Reset Opts:
Restores all default factory settings. Does not delete user fingerprint(s)/passwords or transactions/audit logs.

Del Att Logs:
Clears attendance/transaction log but not user fingerprint(s)/passwords.

Clear all Data:
Deletes both user data and attendance/audit logs.

Clr Admin Pri:
Change the rights of ALL administrator(s) to a normal user.

Show Score:
Display the score of the quality of the fingerprint(s) match.

1:N Fingerprint(s) Match Threshold:
Changes fingerprint(s)-matching "sensitivity"

Must Input ID:
Disable 1:N matching (users MUST first enter user ID number prior to placing finger on sensor)

1:1 Fingerprint(s) Match Threshold
Changes fingerprint matching sensitivity

Voice
Option to turn voice prompts on or off

Card Only
Users clock-in ONLY with cards

FPCard Key
Enter Mifare card key

Update Firmware
Allows updating of US700 firmware

Button Beep

Option to turn audio beep on or off

Adjust Volume

Option to increase or decrease volume

A. Resetting the US700

Resetting your US700 will erase the current system settings but not user fingerprints, passwords or attendance/audit logs.

Press menu.

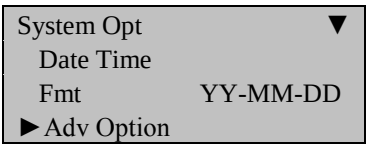
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
  User Manage
►Options
  PenDrive Mng
```

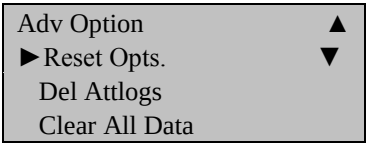
The options menu will appear.

```
Options                 ▼
►System Opt
  Power Mng
  Comm Opt
```

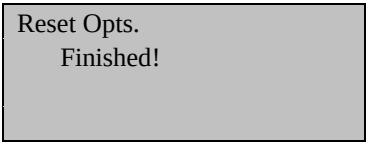
Place the cursor (►) beside system opt and press OK. The system options menu will appear.



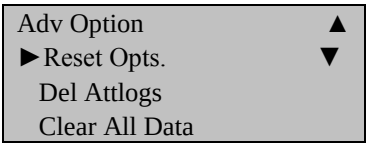
Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



Place the cursor (►) beside reset opts and press OK to proceed with restoring factory settings. Note your user data and attendance/audit logs will remain.



The US700 will prompt you will a finished message and you will be redirected back to the advanced options menu.



Press F1/C four additional times to return to the start up window.

B. Deleting Attendance/Audit Logs

With the selection of this option, all attendance/audit logs will be deleted but user fingerprints and passwords are not.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼
User Manage
►Options
PenDrive Mng

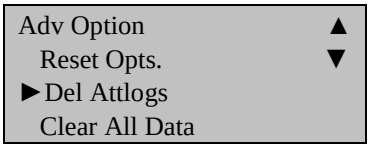
The options menu will appear.

Options ▼
►System Opt
Power Mng
Comm Opt

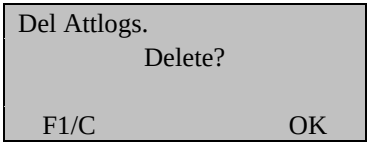
Place the cursor (►) beside system opt and press OK. The system options menu will appear.

System Opt ▼	
Date Time	
Fmt	YY-MM-DD
►Adv Option	

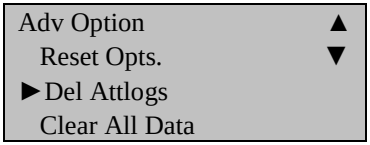
Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



Place the cursor (►) beside del attlogs. To erase all attendance/audit logs, press OK.



The US700 will prompt you to delete this data. To proceed, press OK; to cancel, press F1/C. The advanced options menu will reappear.



Press F1/C four additional times to return to the start up window.

C. Clear all Data

With the selection of this option, all user fingerprints passwords and attendance/audit logs will be deleted.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

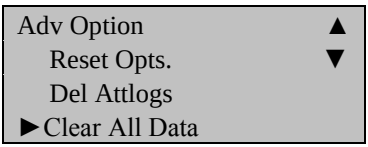
The options menu will appear.

Options	▼
►System Opt	
Power Mng	
Comm Opt	

Place the cursor (►) beside system opt and press OK. The system options menu will appear.

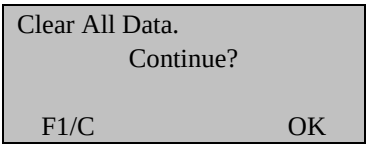
System Opt	▼
Date Time	
Fmt	YY-MM-DD
►Adv Option	

Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.

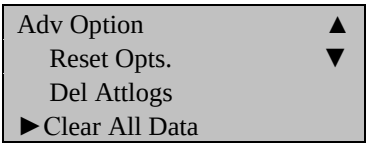


Place the cursor (►) beside clear all data and press OK.

The US700will prompt you to continue with the deletion process.



Press OK to delete all data or press F1/C to cancel. The advanced options menu will reappear.



Press F1/C four additional times to return to the start up window.

D. Clear Administrator Privileges

Selecting this option will revoke all administrative privileges and convert them to a normal user. In addition, this enables all users access to the menu system, therefore, reassigning an administrator immediately is recommended.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

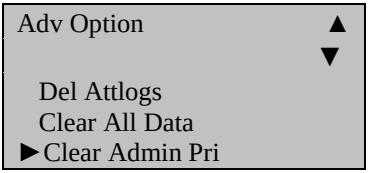
The options menu will appear.

Options	▼
►System Opt	
Power Mng	
Comm Opt	

Place the cursor (►) beside system opt and press OK. The system options menu will appear.

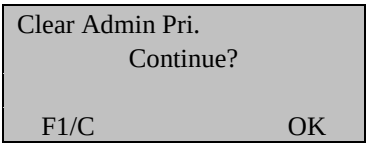
System Opt	▼
Date Time	
Fmt	YY-MM-DD
►Adv Option	

Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.

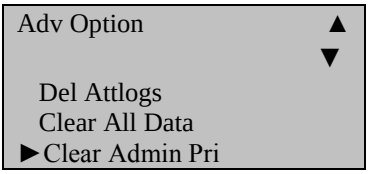


Place the cursor (►) beside clear admin pri and press OK.

The US700 will prompt you to continue with the process.



If you wish to proceed, press OK, if not, press F1/C to cancel. The advanced options menu will reappear.



Press F1/C four additional times to return to the start up window.

E. Show Score

This will display the score quality of the fingerprint match.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

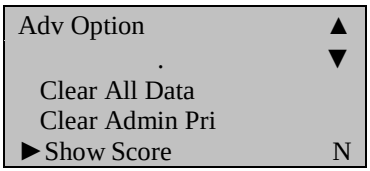
The options menu will appear.

Options	▼
►System Opt	
Power Mng	
Comm Opt	

Place the cursor (►) beside system opt and press OK. The system options menu will appear.

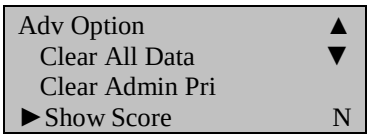
System Opt	▼
Date Time	
Fmt	YY-MM-DD
►Adv Option	

Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.

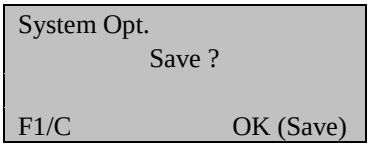


Place the cursor (►) beside show score and press OK.

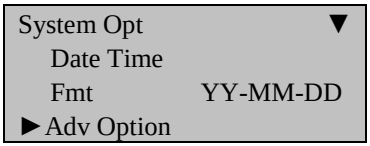
Notice the Y/ N in show score becomes highlighted. Use the scroll ▲/▼ keys to change yes or no. Press OK to confirm the change.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to confirm change or press F1/C to cancel. The system options menu will reappear.



Press F1/C three additional times to return to the start up window.

F. 1:N Fingerprint(s) Match Threshold

This feature allows you to change the sensitivity setting of the sensor when fingerprints are being matched.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
  User Manage
►Options
  PenDrive Mng
```

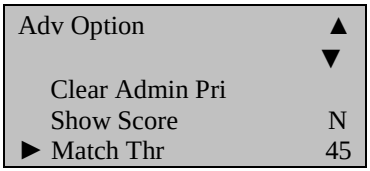
The options menu will appear.

```
Options                 ▼
►System Opt
  Power Mng
  Comm Opt
```

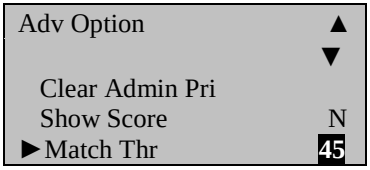
Place the cursor (►) beside system opt and press OK. The system options menu will appear.

```
System Opt              ▼
  Date Time
  Fmt          YY-MM-DD
►Adv Option
```

Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



Place the cursor (►) beside match thr and press OK. Notice the 45 in match threshold becomes highlighted.



Use the keypad or scroll ▲/▼ keys to change the threshold setting.

Note: Decreasing the threshold will decrease the sensitivity of the sensor when reading difficult fingerprints.

If the US700 is experiencing fingerprint reading difficulties, consider decreasing the threshold in 5-unit increments until the vast majority of users fingerprints can be read consistently.

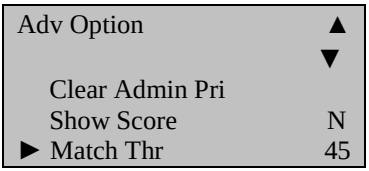
If decreasing the threshold does not help improve fingerprint reads, consider issuing PIN numbers for those users having difficulty with their fingerprints being read.

Table **1—1** Suggested Match Threshold Settings

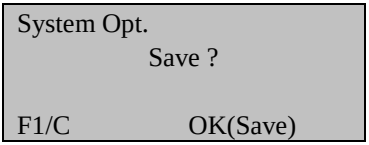
FRR	FAR	1:N (Many)	1:1
High	Low	45	25
Middle	Middle	35	15

Low	High	25	10

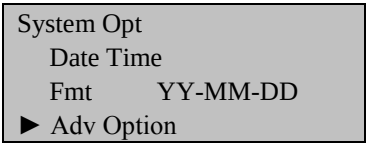
After changing the threshold, press OK.



Press F1/C to exit and the US700 will prompt you to save new changes.



Press OK to confirm changes or press F1/C to cancel. The system options menu will reappear.



Press F1/C three additional times to return to the start up window.

G. Must Input ID

This feature disables 1:N fingerprint matching and places the US700 in 1:1 fingerprint matching mode.

Although 1:1 fingerprint matching requires an extra step of entering a user's ID number prior to scanning their finger, 1:1 fingerprint matching is more consistent than 1:N (many) fingerprint matching.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
  User Manage
►Options
  PenDrive Mng
```

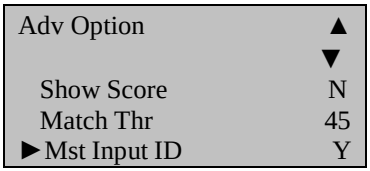
The options menu will appear.

```
Options                 ▼
►System Opt
  Power Mng
  Comm Opt
```

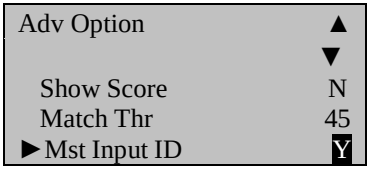
Place the cursor (►) beside system opt and press OK. The system options menu will appear.

```
System Opt              ▼
  Date Time
  Fmt          YY-MM-DD
►Adv Option
```

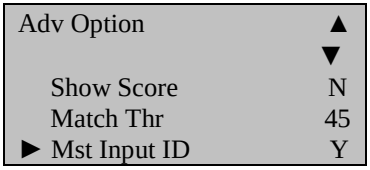
Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



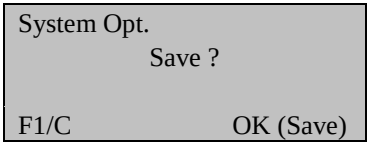
Place the cursor (►) beside must input ID and press OK. Notice the Y or N for must input ID is highlighted.



Use the scroll ▲/▼ keys to enter either Y or N. Press OK after making the change.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to save changes or press F1/C to cancel. The system options menu will reappear.

System Opt	▼
Date Time	
Fmt	YY-MM-DD
►Adv Option	

Press F1/C three additional times to return to the start up window.

Welcome Check-In
HH:MM
MM/DD/YY DAY

H. 1:1 Fingerprint(s) Match Threshold

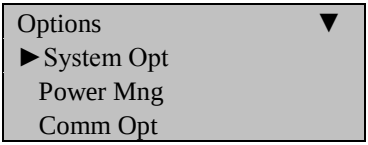
This feature allows you to change fingerprint sensor sensitivity.

Press menu.

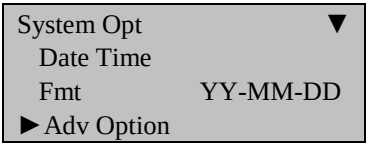
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

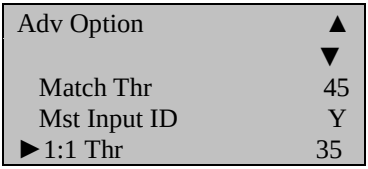
The options menu will appear.



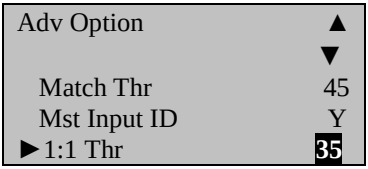
Place the cursor (►) beside system opt and press OK. The system options menu will appear.



Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



Place the cursor (►) beside 1:1 thr and press OK. Notice the 35 in match threshold becomes highlighted.



Use the keypad or scroll ▲/▼ keys to change the threshold setting.

Note: Decreasing the threshold decreases the fingerprint sensor sensitivity.

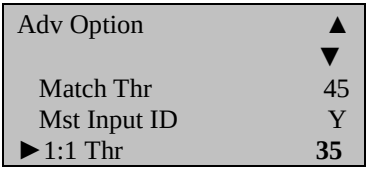
If the US700 is experiencing fingerprint reading difficulties, consider decreasing the threshold in 5-unit increments until the vast majority of users fingerprints can be read consistently.

If decreasing the threshold does not help improve fingerprint reads, consider issuing PIN numbers for those users having difficulty with their fingerprints being read.

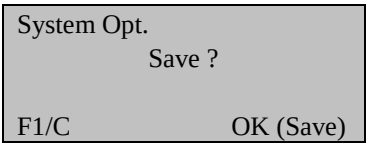
Table **1—1** Suggested Match Threshold Settings

FRR	FAR	1:N (many)	1:1
High	Low	45	25
Middle	Middle	35	15
Low	High	25	10

After changing the threshold, press OK to confirm change.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to confirm changes or press F1/C to cancel. The system options menu will reappear.

System Opt ▼
Date Time
Fmt YY-MM-DD
►Adv Option

Press F1/C three additional times to return to the start up window.

Welcome Check-In
HH:MM
MM/DD/YY DAY

I. Voice

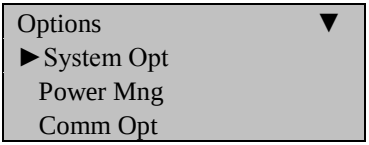
This option allows you to turn voice prompts on or off.

Press menu.

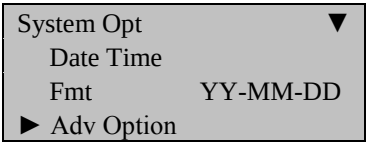
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼
User Manage
►Options
PenDrive Mng

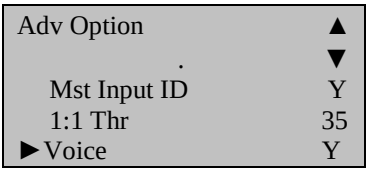
The options menu will appear.



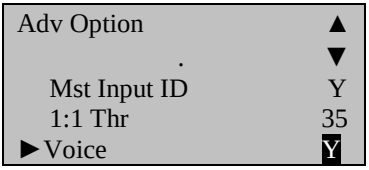
Place the cursor (►) beside system opt and press OK. The system options menu will appear.



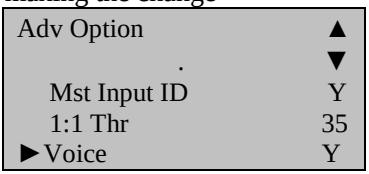
Place the cursor (►) beside adv option and press OK. The advanced options menu will appear.



Place the cursor (►) beside voice and press OK. Notice the Y or N for voice becomes highlighted.



Use the scroll ▲/▼ keys to enter either Yes or No and press OK after making the change



Press F1/C to exit and the US700 will prompt you to save your changes.

```
System Opt.
          Save ?

F1/C              OK (Save)
```

Press OK to confirm changes or press F1/C to cancel. The system options menu will return.

```
System Opt
   Date Time
   Fmt      YY-MM-DD
► Adv Option
```

Press F1/C three additional times to return to the start up window.

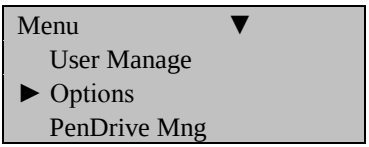
```
   Welcome   Check-In
      HH:MM
   MM/DD/YY  DAY
```

J. Card Only

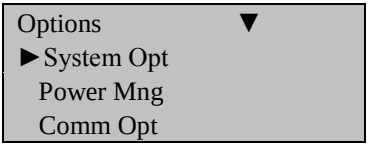
All fingerprints and passwords will be disabled (but not deleted).

Press menu.

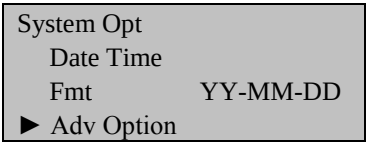
Use the scroll ▲/▼ keys, place the cursor (►) beside options and press OK.



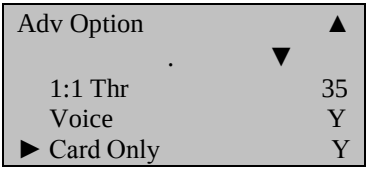
The options menu will appear.



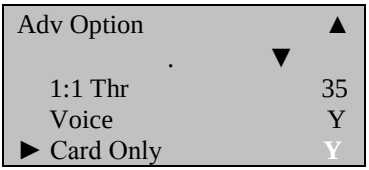
Place the cursor (►) beside system option and press OK. The system options menu should appear.



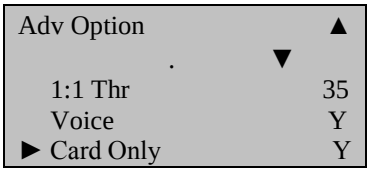
Place the cursor (►) beside advanced option and press OK. The advanced options menu will appear.



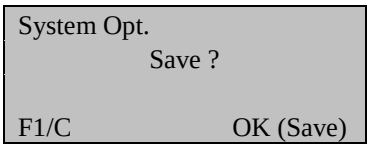
Place the cursor (►) beside card only and press OK. Note the Y or N for card only becomes highlighted.



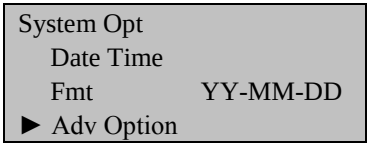
Use the scroll ▲/▼ keys to enter yes or no and press OK to confirm the new change.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to accept changes or F1/C to cancel changes. The system options menu will reappear.



Press F1/C three additional times to return to the start up window.

K. FPCard Key

You will need to enter the fingerprint card key (also known as Mifare card key).

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                ▼
   User Manage
► Options
   PenDrive Mng
```

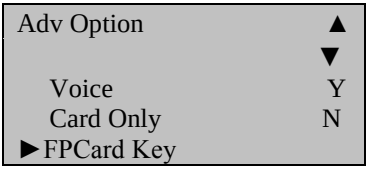
The options menu will appear.

```
Options             ▼
►System Opt
  Power Mng
  Comm Opt
```

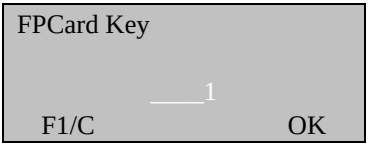
Place the cursor (►) beside sys opt and press OK. The system options menu will appear.

```
System Opt
   Date Time
   Fmt        YY-MM-DD
► Adv Option
```

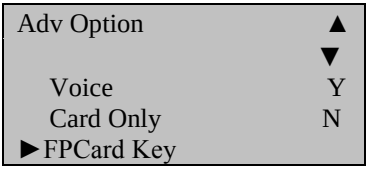
Place the cursor (►) beside adv opt and press OK. The advanced options menu will appear.



Place the cursor (►) beside FPCard Key and press OK. Notice FPCard Key becomes highlighted.



Use the keypad to enter the FPCard Key and when complete, press OK to confirm. The advanced options menu will reappear.



Press F1/C four additional times to return to the start up window.

L. Update Firmware

Updating firmware on the US700 can be done by using a USB pen drive (flash drive). **Note:** only change the firmware under the guidance of your dealer or ZK Software Tech Support.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                ▼
   User Manage
► Options
   PenDrive Mng
```

The options menu will appear.

```
Options             ▼
►System Opt
  Power Mng
  Comm Opt
```

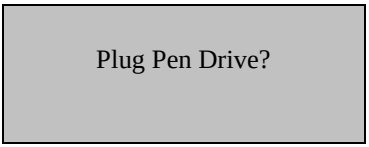
Place the cursor (►) beside system option and press OK. The system options menu will appear.

```
System Opt
   Date Time
   Fmt          YY-MM-DD
► Adv Option
```

Place the cursor (►) beside advanced option and press OK. The advanced options menu will appear.

```
Adv Option          ▲
                    ▼
   Card Only        N
   FPCard Key
► Upd Firmware
```

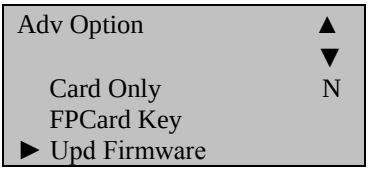
Place the cursor (►) beside upd firmware and press OK. You will be instructed to plug in your pen drive.



Insert the USB pen drive (flash drive) containing the upgrade file into the USB port.

The US700 will automatically recognize the upgraded firmware file and will prompt you with instructions.

When complete, press OK and the advanced option menu will reappear.



Press F1/C four additional times to return to the start up window.

M. Button Beep

Allows you to turn on or off sound.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
   User Manage
► Options
   PenDrive Mng
```

The options menu will appear.

```
Options                 ▼
►System Opt
  Power Mng
  Comm Opt
```

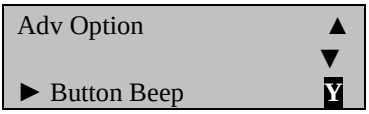
Place the cursor (►) beside system option and press OK. The system options menu will appear.

```
System Opt
   Date Time
   Fmt          YY-MM-DD
►Adv Option
```

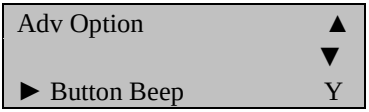
Place the cursor (►) beside advanced option and press OK.
The advanced options menu will appear.

```
Adv Option              ▲
                        ▼
   ► Button Beep
Y
```

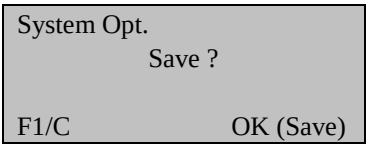
Place the cursor (►) beside button beep and press OK. Note the Y or N for button beep becomes highlighted.



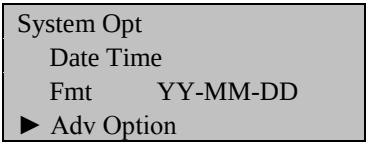
Use the scroll ▲/▼ keys to enter either Y or N and press OK to confirm the change.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to accept or press F1/C to cancel. Once confirmed, the system options menu will reappear.



Press F1/C three additional times to return to the start up window.

N. Adjust Volume

Allows you to increase or decrease volume on your US700.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
► Options	
PenDrive Mng	

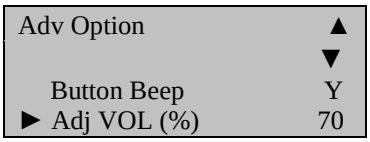
The options menu will appear.

Options	▼
►System Opt	
Power Mng	
Comm Opt	

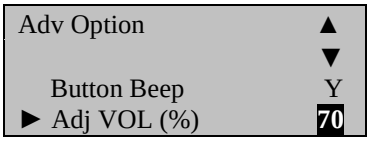
Place the cursor (►) beside system option and press OK. The system options menu will appear.

System Opt	
Date Time	
Fmt	YY-MM-DD
► Adv Option	

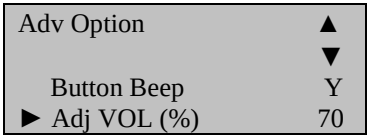
Place the cursor (►) beside advanced option and press OK. The advanced options menu will appear.



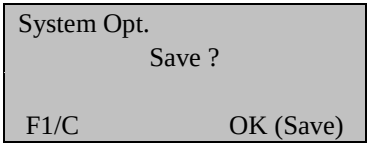
Place the cursor (►) beside adj vol and press OK. Note the 70 will become highlighted.



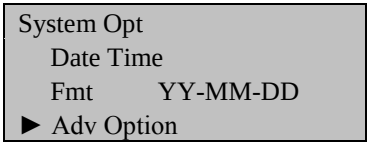
Use the keypad or scroll ▲/▼ keys to adjust the volume and press OK to confirm changes.



Press F1/C to exit and the US700 will prompt you to save your changes.



Press OK to accept changes or F1/C to cancel changes. After confirming, the system options menu will reappear.



Press F1/C three additional times to return to the start up window.

IX. Power Management

There are various power modes that can be selected. Below is a brief description of each option and steps displaying how to access these modes.

Shut down schedule

Turn off the power at pre-defined times.

Power on schedule

Turn on the power at pre-defined times.

Sleep schedule

Enable sleep mode at pre-defined times.
Press any key to bring the US700out of sleep mode.

Idle

This setting determines if the US700should remain idle indefinitely or if it should enter “Sleep Mode” after a specified period of time.

Idle Minute

This setting determines how long the US700can remain idle prior to entering sleep mode.

Lock Power (Yes or No)

A. Set Shutdown Schedule

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

The options menu will appear.

Options	▼
System Opt	
►Power Mng	
Comm Opt	

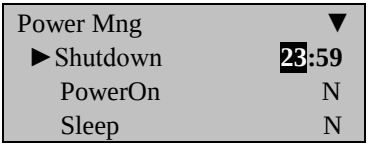
Place the cursor (►) beside power manage and press OK. The power manage menu will appear.

Power Mng	▼
►Shutdown	N
PowerOn	N
Sleep	N

Place the cursor (►) beside shutdown and press OK. You will be prompted to schedule the shutdown function. Press OK to proceed.

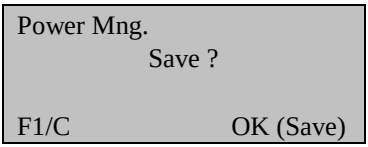
Shutdown	
Set Sch. Fun?	
F1/C	OK

Note the 23:59 in shutdown becomes highlighted.

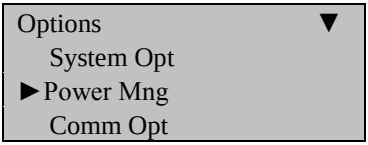


Use the scroll ▲/▼ keys or the keypad to change the hour and time the US700 should shutdown.

Press OK to confirm the change then press F1/C to exit. The US700 will prompt you to save the change.



Press OK to accept or press F1/C to cancel the change. Note the options menu will reappear.



Press F1/C twice to return to the start up window.

B. Set Power On Schedule

Press menu.

Use the scroll▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

The options menu will appear.

Options	▼
System Opt	
►Power Mng	
Comm Opt	

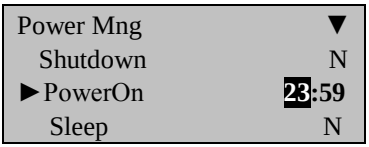
Place the cursor (►) beside power manage and press OK. The power manage menu will appear.

Power Mng	▼
Shutdown	N
►PowerOn	N
Sleep	N

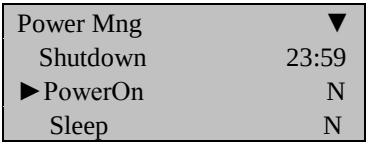
Place the cursor (►) beside poweron and press OK. You will be prompted to schedule a power on function.

PowerOn	
Set Sch. Fun?	
F1/C	OK

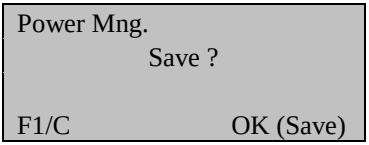
Press OK to proceed with scheduling the PowerOn Function. Note the 23:59 in poweron becomes highlighted.



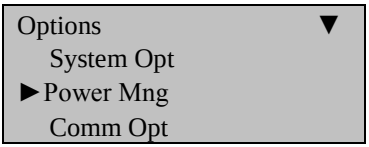
Use the scroll ▲/▼ keys and keypad to change the hour and time the US700 should power on. Press OK to save the change.



Press F1/C to exit and the US700 will prompt you to save your change.



Press OK to accept changes or F1/C to cancel. The options menu will reappear.



Press F1/C two additional times to return to the start up window.

C. Set Sleep Schedule

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

The options menu will appear.

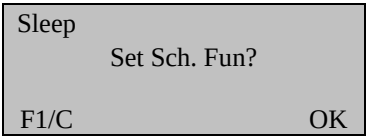
Options	▼
System Opt	
►Power Mng	
Comm Opt	

Place the cursor (►) beside power manage and press OK. The power manage menu will appear.

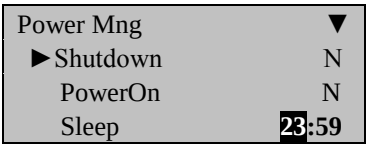
Power Mng	▼
Shutdown	N
PowerOn	N
►Sleep	N

Place the cursor (►) beside sleep and press OK.

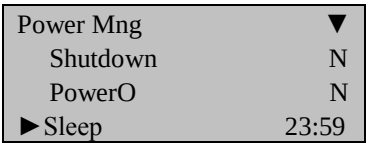
You will be prompted to schedule the sleep function.



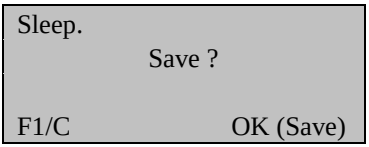
Press OK to schedule the sleep function. Note the 23:59 in sleep becomes highlighted.



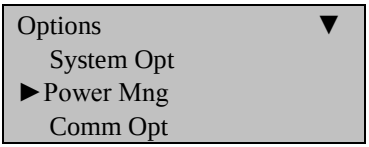
Use the scroll ▲/▼ keys and keypad to change the hour and time the US700 should sleep. Press OK to confirm change.



Press F1/C to exit and the US700 will prompt you to save your change.



Press OK to accept change or press F1/C to cancel. The options menu will reappear.

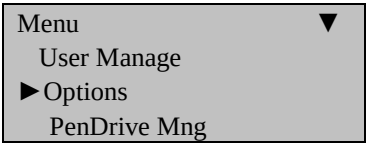


Press F1/C two additional times to return to the start up window.

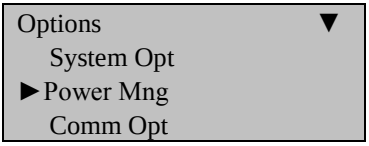
D. Set Idle to Off or Sleep

Press menu.

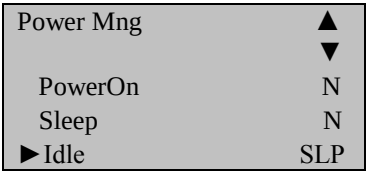
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



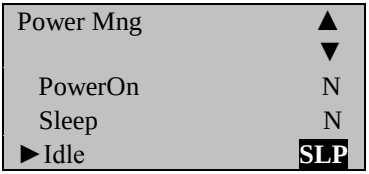
The options menu will appear.



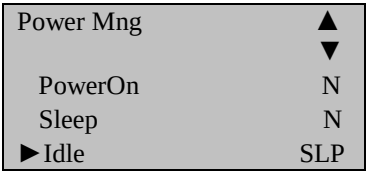
Place the cursor (►) beside power manage and press OK. The following screen will appear.



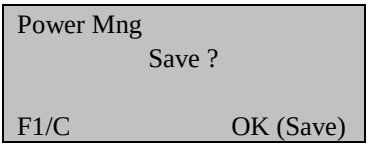
Place the cursor (►) beside idle and press OK.



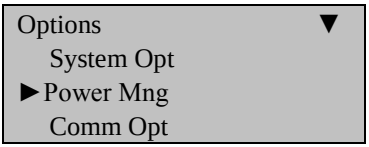
Use the scroll ▲/▼ keys to change the idle mode to sleep or off. When complete, press OK to confirm change.



Press F1/C to exit and the US700 will prompt you to save your change.



Press OK to accept change or press F1/C to cancel. The options menu will reappear.

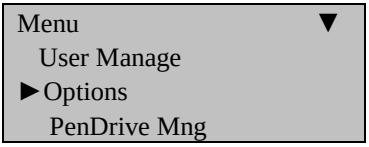


Press F1/C two additional times to return to the start up window.

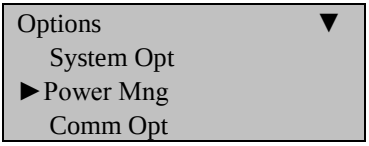
E. Set Idle Minutes

Press menu.

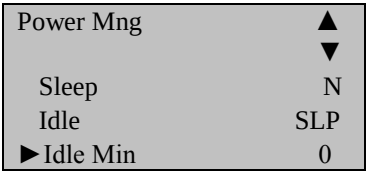
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



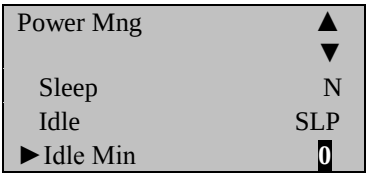
The options menu will appear.



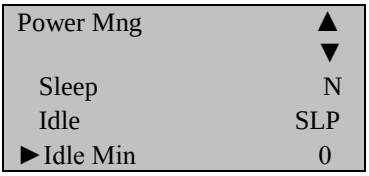
Place the cursor (►) beside power manage and press OK. The power manage menu will appear.



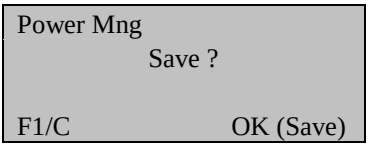
Place the cursor (►) beside idle min and press OK. Note the 0 in idle min becomes highlighted.



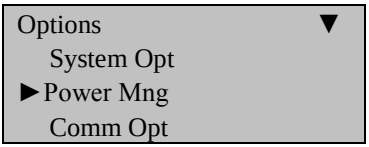
Use the scroll ▲/▼ keys to change the idle minutes and press OK to confirm change.



Press F1/C to exit and the US700 will prompt you to save the change.



Press OK to accept change or press F1/C to cancel. The options menu will reappear.

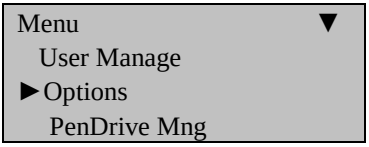


Press F1/C two additional times to return to the start up window.

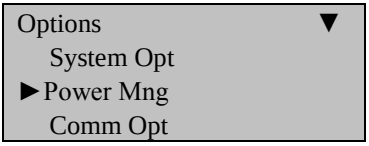
F. Lock Power

Press menu.

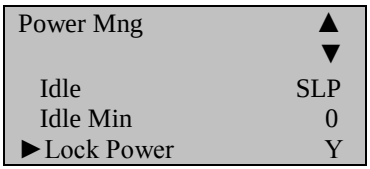
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



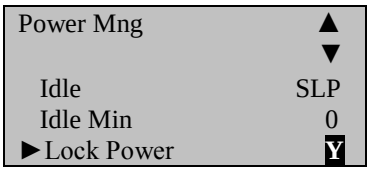
The options menu will appear.



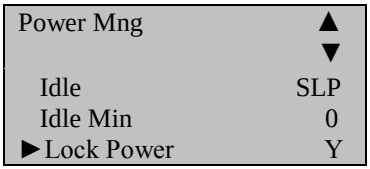
Place the cursor (►) beside power manage and press OK. The power manage menu will appear.



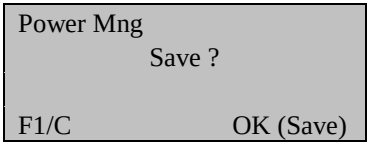
Place the cursor (►) beside lock power and press OK. Note the Y in lock power becomes highlighted.



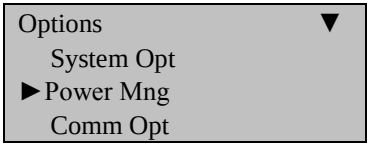
Use the scroll ▲/▼ keys to change the Y or **N** in lock power. Press OK to confirm change.



Press F1/C to exit and the US700 will prompt you to save the change.



Press OK to accept change or press F1/C to cancel. The options menu will reappear.



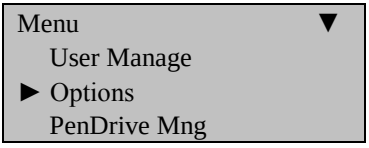
Press F1/C two additional times to return to the start up window.

X. Communication Options

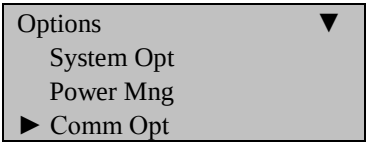
The US700can communicate via the Network (Ethernet) or RS 232/485. Below are instructions on how to reach this option in the US700.

Press menu.

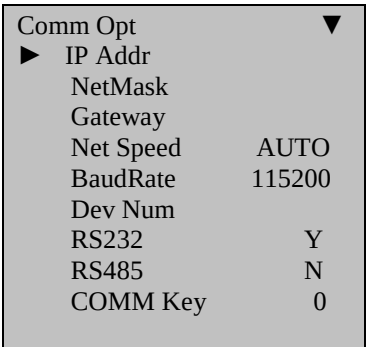
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



The options menu will appear.



Place the cursor (►) beside comm option and press OK. The following communication settings are available.



A. Network Connectivity

The following settings are available.

Machine IP address

Default IP is 192.168.1.201. This can be modified, but do NOT use an IP address that is being used on the same network by another device.

Subnet mask

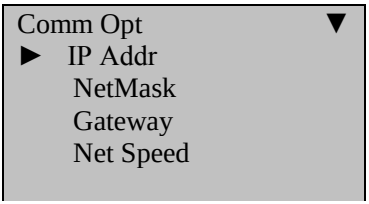
Default mask 255.255.255.0. This can be modified.

Gateway address

Default gateway address is 0.0.0.0. This can be modified.

Network speed

Notice three available options (Automatic, 10M and 100M).



To change network settings begin at the start up window and press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
► Options	
PenDrive Mng	

The options menu will appear.

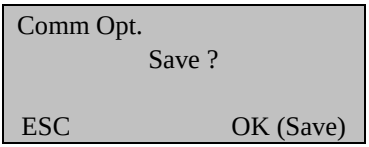
Options	▼
System Opt	
Power Mng	
► Comm Opt	

Place the cursor (►) beside comm. opt and press OK. The following network communication settings are available.

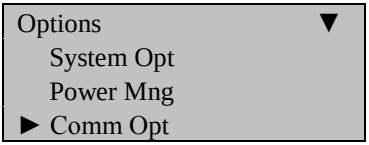
Comm Opt	▼
► IP Addr	
NetMask	
Gateway	
Net Speed	AUTO

Use the scroll ▲/▼keys and place the cursor beside the desired field and change the communication setting as desired.

Press OK after modifying the desired communication settings. Press F1/C to exit. You will be prompted to save your new changes.



Press OK to confirm changes or press F1/C to cancel any changes. The options menu will reappear.



Press F1/C two additional times to return to the start up window.

B. RS 232/485 Serial Connectivity

The following settings are available:

Baud rate:
Choose either 9600, 19200, 38400, 57600, 115200.

RS232:
Enable or disable RS **232** communication.

RS485:
Enable or disable RS **485** communication.

COMM Key:
Secure the Serial connection with a Key (password). The default value is set to 0.

Dev Num:

Assign each US700a unique Device Number ranging from 1-255. This device number is also the site code if the US700is using a Wiegand communication protocol with a 3rd party access control panel.

Comm Opt	▼
► BaudRate	115200
Dev Num	
RS232	Y
RS485	N
COMM Key	0

To change RS 232/485 settings press menu.

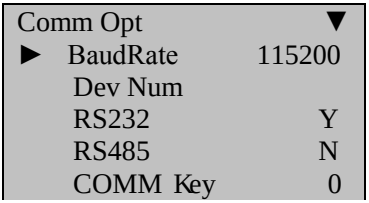
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
► Options	
PenDrive Mng	

The options menu will appear.

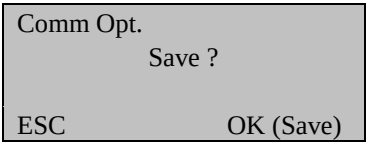
Options	▼
System Opt	
Power Mng	
► Comm Opt	

Place the cursor (►) beside comm opt and press OK. The following RS 232/485 communication settings are available.

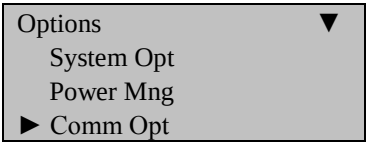


Place the cursor beside the desired field and change the communication setting as desired. Press OK to confirm changes.

When finished, press F1/C to exit. You will be prompted to save your changes.



Press OK to save new changes or press F1/C to cancel. The options menu will reappear.



Press F1/C two additional times to return to the start up window.

XI. **Log Options**

The US700 has 3 logging options:

Alarm Superlog

Alarm Attendance Log

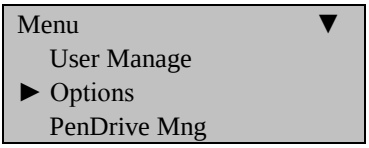
When the number of transactions reaches a set value a warning alarm will be sounded to clear the memory.

Recheck Minute

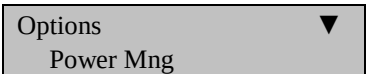
This can be set to avoid record duplicate punches. For eg. If this value is set as 2, then it will not record the transaction of the same user ID within 2 minutes of the first punch.

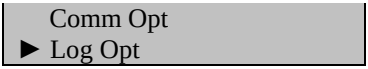
Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



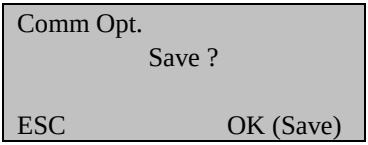
The options menu will appear.



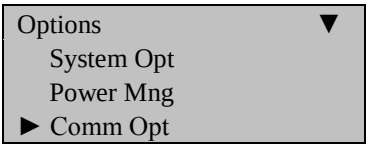


Place the cursor (►) beside log option and press OK. The following screen appears.

Place the cursor beside the desired field, press OK to access that field and modify your settings. When finished, press F1/C to exit. You will be prompted to save your changes.



Press OK to confirm new changes or press F1/C to cancel. The options menu will reappear.



Press F1/C two additional times to return to the start up window.

XII. Access Control

The US700 is also an access control terminal**.**

Using the US700 with 3rd Party Door Control Panels:

WHEN THE US700 IS USED WITH A 3RD PARTY ACCESS CONTROL PANEL, THE US700 SOLE FUNCTION IS VERIFYING THE IDENTITY OF THE USERS.

AFTER AN IDENTITY IS VERIFIED, THE US700 SENDS A 26-BIT WIEGAND SIGNAL TO A 3RD PARTY CONTROL PANEL PROVIDING ONLY USER-ID MATCH CONFIRMATION.

IT IS A 3RD PARTY PANEL AND NOT THE US700 WHICH CONTROLS DOOR ACCESS IN THIS CONFIGURATION.

THEREFORE, USING THE US700 WITH A 3RD PARTY DOOR CONTROL PANEL, REFER ALL ACCESS-RELATED QUESTIONS TO THE 3RD PARTY CONTROL PANEL MANUFACTURER AND NOT ZK SOFTWARE.

US700 as a STAND-ALONE Door Controller

The US700 has five main access control options:

Time Period Settings:

Defines time periods which doors-access is granted or denied (i.e. Weekdays, Weekends, 9-5 day shift, Shift 2, Midnight Shift, holidays, etc).

Group Options:

Creates groups containing users with the same access rights.

Assigning time periods to Groups:

Assign time periods to groups based upon group access rights.

Access Combinations

Only allows door-access when multiple authorized users/administrators are present. No single user/administrator can access the door unless another authorized user/administrator is present.

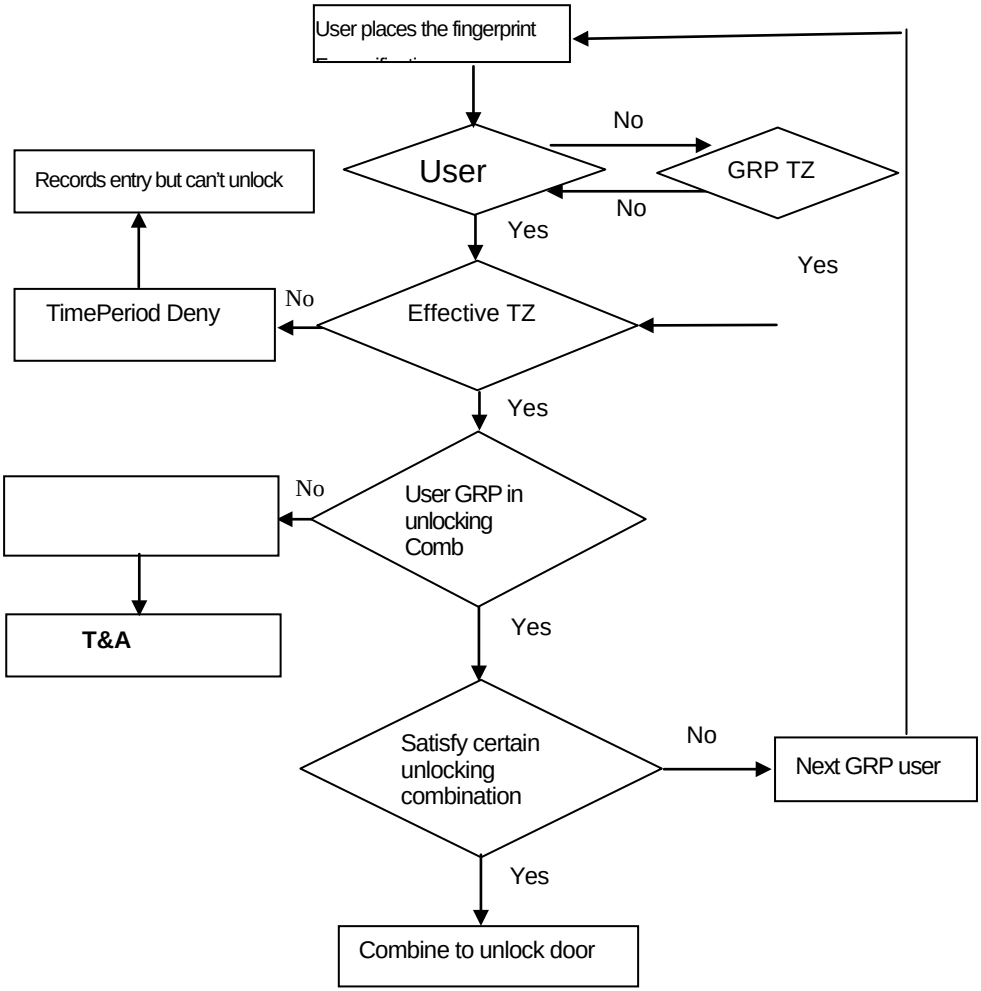
Lock:

Set how long door-lock remains open after an authorized user/administrator opens the door.

DSen. Delay:

The door sensor delay determines how long to keep the door unlocked, after an authorized user opens the door.

Verification Flow of Access Options



A. Time Period Settings

A time period is a user-defined period of time when the door remains accessible or inaccessible to specified users or groups of users.

Examples of time periods include work shifts, work days, weekends, holidays, annual company closings, etc.

The US700 can store up to 50 time periods and each user can be assigned up to three different time periods. If a user belongs to multiple time periods, then they have door-access during all those time periods assigned to them.

Example:

Time Period 1 (TP No. 1) is weekend-access ONLY.
Time Period 2 (TP No. 2)) is weekday-access ONLY.
If a user belongs to **BOTH** TP1 and TP2, they has access all 7 days of the week
Time Periods use an “OR” Logic.

Every time period has a start and end time and adhere to the format **HH:MM - HH:MM.** Time periods are based on a 24-hour clock (no AM or PM).

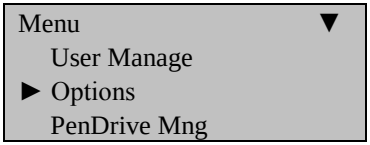
To prohibit users for a 24-hour period, create the following Time Period: **23:59 - 23:58.** This means there is no door access starting at 11:59 pm until 11:58 pm the following day. The door is always inaccessible, even though the user is enrolled in the US700.

To allow unrestricted door access for a 24-hour period, create the following Time Period: **00:00-23:59.** This means there is unrestricted access starting at Midnight until 11:59 PM. The door is always accessible to users enrolled on the US700.

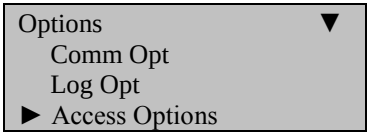
Below is a visual process on how to create time periods.

Press menu.

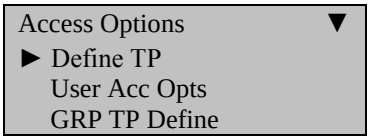
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.



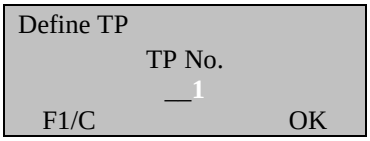
The options menu will appear.



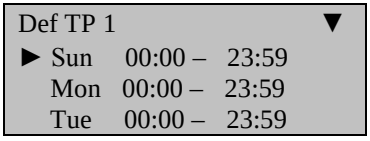
Place the cursor (►) beside access options and press OK. The options menu will appear.



Place the cursor (►) beside define TP and press OK. The following screen will appear.

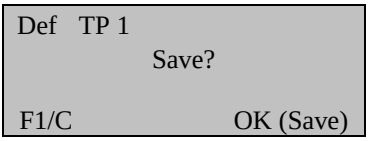


Press OK to accept time period number **1** (TP 1). The following screen will appear.

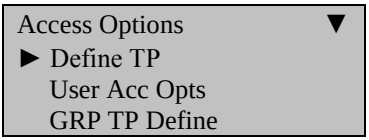


Use the scroll ▲ / ▼ keys and keypad to program the start and end times for the various days of the week.

When finished, press F1/C to exit. You will be prompted to save your changes.

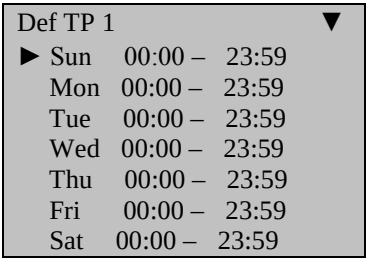


Press the OK to save changes or F1/C to cancel. After selecting either option, the access options menu will reappear.



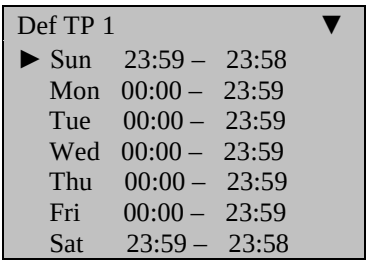
Below are various examples of creating time periods.

Restricting Door Access to Weekdays only:



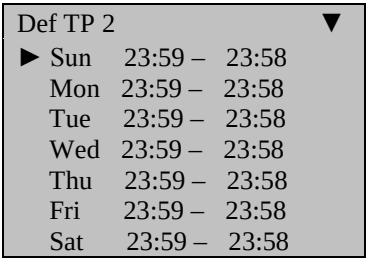
In the above figure, notice each day is programmed with 00:00-23:59. This means the doors are accessible to authorized users all the time.

If your operating hours are typically Monday-Friday 9am to 5pm, it is unlikely that your employees will need door access on the weekends. Therefore, you might consider creating a weekend time period as seen below:



It is a good idea to create a time period during which all doors remain inaccessible. Establishing this time period during the holiday is when it is typically used.

An example of restricting door access completely.



In the above figure, each day is programmed with 23:59 – 23:58. This means the doors are not accessible to authorized users all the time.

If your employees have two different work shifts, you might consider a time period for each work shift.

Example of restricting door access to shift 1 employees.

If shift 1 employees work 9 a.m. to 5 p.m. and shift 2 employees work 5 p.m. to 1 a.m., consider creating Time Period 2 (TP 2) for shift 1 employees. This will deny door access to shift 1 employees' after 5:00pm during the week. Shift 1 employees will also be denied door access throughout the weekend.

Evening and weekend-restricted door access is shown below:

Def TP 2 ▼
► Sun 23:59 – 23:58
Mon 09:00 – 17:00
Tue 09:00 – 17:00
Wed 09:00 – 17:00
Thu 09:00 – 17:00
Fri 09:00 – 17:00
Sat 23:59 – 23:58

B. Group Time Period Settings

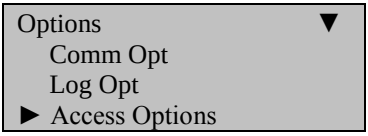
It is critical that you create time periods before assigning individuals to their respective groups. This saves time and enforces the programming of group access rights once. \

Press menu.

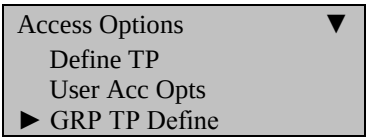
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼
User Manage
► Options
PenDrive Mng

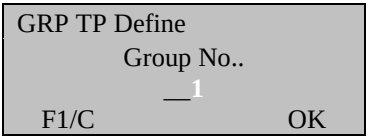
The options menu will appear.



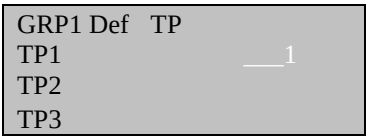
Place the cursor (►) beside access options and press OK. The options menu will appear.



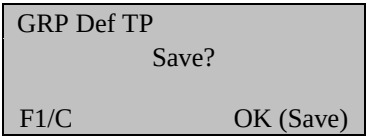
Place the cursor (►) beside grp tp define and press OK. The following screen will appear.



To accept group no 1, press the OK. The following screen will appear.



Place the cursor (►) beside the time period you are adding a group number to. When finished, press F1/C to exit. You will be prompted to save your changes.



Press OK to accept changes or F1/C to cancel. After choosing an option, you will return to the access options menu.

```
Access Options          ▼
   Define TP
   User Acc Opts
► GRP TP Define
```

Press F1/C three additional times to return to the start up window.

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```

C. User Access Options

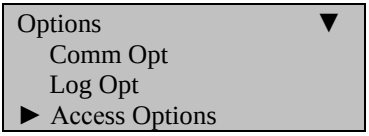
After a user has been enrolled, you can define their door access options by assigning them to groups that are defined by time periods.

Press menu.

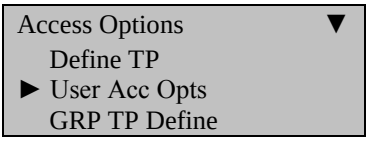
Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
   User Manage
► Options
   PenDrive Mng
```

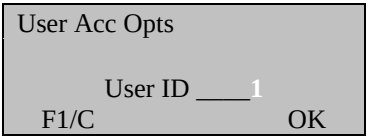
The options menu will appear.



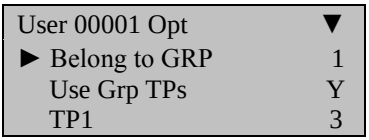
Place the cursor (►) beside access options and press OK. The options menu will appear.



Place the cursor (►) beside user acc opts and press OK. The following screen will appear.

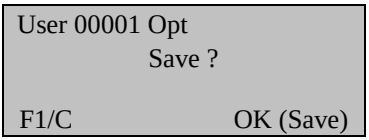


Select the user ID number you want to change door access options to and press OK.

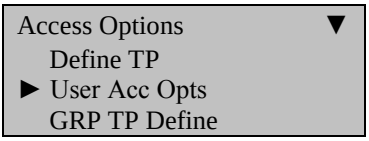


Place the cursor (►) beside the value you wish to change and press OK to proceed.

Indicate which group number that user ID 00001 will belong to and the time periods associated with group number 1 will apply to User ID 00001.



Press the OK key to accept changes or press F1/C to cancel. After choosing an option, you will be redirected to the access options menu.



Press F1/C two additional times to return to the start up window.

D. Access Combination Settings

The US700 can be configured where 2 to 5 users need to present their authorized fingerprints prior to the door opening. This is called multi-user combination.

Multi-user combination provides the highest level of door security, which is common when protecting critical assets or the safety of the public. Typical multi-user combination applications include:

- Financial Assets (bank vaults, safes, etc)
- Bio hazardous waste (hospitals).
- Utility plants (i.e. nuclear)
- Weapons Systems

If only one user of a multi-user combination group attempts access to the door without the others, the door will not open.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼
User Manage
► Options
PenDrive Mng

The options menu will appear.

Options ▼
Comm Opt
Log Opt
► Access Options

Place the cursor (►) beside access options and press OK. The access options menu will appear.

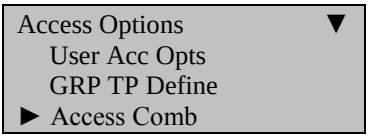
Access Options ▼
User Acc Opts
GRP TP Define
► Access Comb

Place the cursor (►) beside access comb and press OK. The following screen will appear.

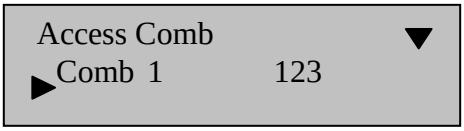
Access Comb ▼
Comb 1 1
Comb 2
Comb 3

Scroll with the ▲/▼ keys and indicate which combinations of "Groups" will be necessary to clock-in, prior to the door releasing.

Press OK to accept changes or press F1/C to cancel any changes. After choosing either option, you will be redirected to the access options menu.

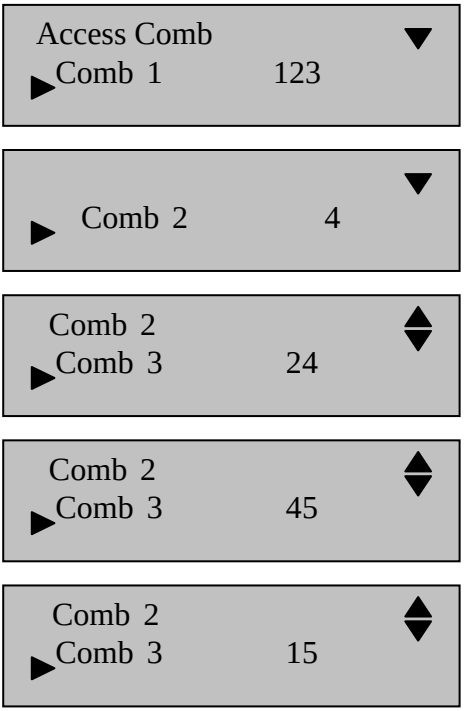


Examples of unlocking/access combinations.



- 123 is a combination.
- 4 is a combination.
- 24 is a combination.

- 45 is a combination.
- 15 is a combination.



Combination 1:

When any users belonging to group 1, group 2 and group 3 are all present, the door will only open when all 3 Group members place their fingers on the US700 consecutively.

Combination 3:

When any 2 users belonging to group 4 and group 5 are both present, the door will only release when both users place their fingers on the US700.

E. Lock

The door lock control setting determines how long the door will remain open (unlocked) after a user gains access.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu ▼
User Manage
► Options
PenDrive Mng

The options menu will appear.

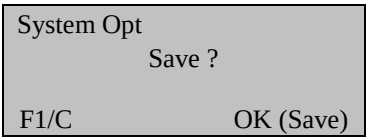
Options ▼
Comm Opt
Log Opt
► Access Options

Place the cursor (►) beside access options and press OK. The access options menu will appear.

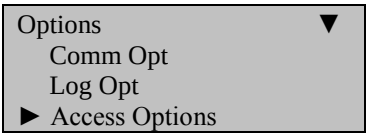
Access Options ▲
▼
GRP TP Define
Access Comb
► Lock 150

Place the cursor (►) beside lock and press OK to change to desired time. When the desired time is set, press OK to set lock time.

Note the default is 150 ms (approximately 7 seconds). Press F1/C to exit and you will be prompted to save your changes.



Press OK to accept change or press F1/C to cancel change. After selecting confirming, you will be redirected to the options menu.



Press F1/C two additional times to return to the start up window.

F. Door Sensor Delay

The door sensor delay determines how long the door will remain unlocked after an authorized user opens the door.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
► Options	
PenDrive Mng	

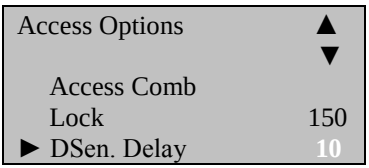
The options menu will appear.

Options	▼
Comm Opt	
Log Opt	
► Access Options	

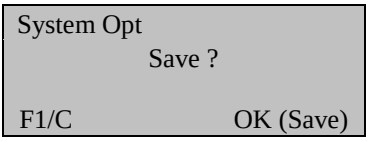
Place the cursor (►) beside access options and press OK. The following screen will appear.

Access Options	▲ ▼
Access Comb	
Lock	150
► DSen. Delay	10

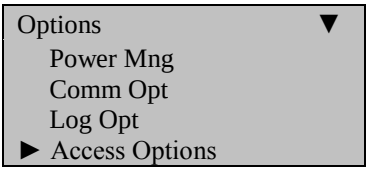
Place the cursor (►) beside dSen delay. Note that the default is 10. If you would like to change this number, press OK and use the scroll keys or keypad to change the number.



When finished, press OK then F1/C. You will be prompted to save your changes.



Press OK to confirm changes or press F1/C to cancel changes. You will be redirect to the options menu.



Press F1/C two additional times to return to the start up window.

G. Door Sensor Mode

Dsen. mode has 3 options.

No - No use door magnistor
NC - When the door is open, the lock is open.
None - When the door is closed, the lock is closed

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
   User Manage
► Options
   PenDrive Mng
```

The options menu will appear.

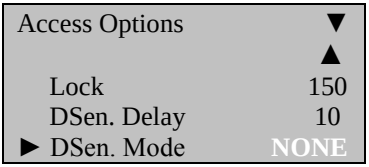
```
Options                 ▼
   Comm Opt
   Log Opt
► Access Options
```

Place the cursor (►) beside access options and press OK. The access options menu will appear.

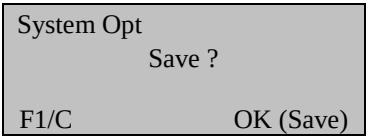
```
Access Options          ▼
                        ▲
   Lock                150
   DSen. Delay          10
► DSen. Mode          NONE
```

Place the cursor (►) beside dSen mode. Note that the default is set to none.

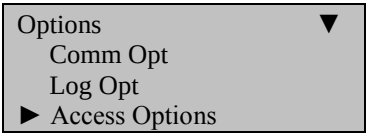
If you wish to change it, press OK and use the scroll keys to change the mode to no or nc.



When finished, press OK twice to save change then press F1/C to exit. You will be prompted to save your changes.



Press OK to confirm changes or press F1/C to cancel changes. You will be redirected to the options menu.



Press F1/C two additional times to return to the start up window.

H. Door Sensor Alarm

The Door Sensor Delay determines how long the door will remain OPEN until the US700 sends an alarm.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

Menu	▼
User Manage	
► Options	
PenDrive Mng	

The options menu will appear.

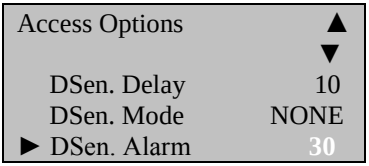
Options	▼
Comm Opt	
Log Opt	
► Access Options	

Place the cursor (►) beside access options and press OK. The access options menu will appear.

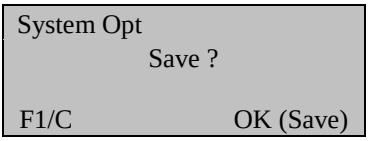
Access Options		▲
		▼
DSen. Delay		10
DSen. Mode		NONE
► DSen. Alarm		30

Place the cursor (►) beside dSen alarm. Note the default is set to 30.

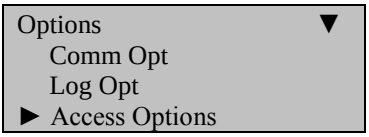
If you wish to change this value, press OK and use the scroll keys or keypad to change the value.



When finished, press OK twice and press F1/C to exit. You will be prompted to save your changes.



Press OK to confirm changes or press F1/C to cancel changes. You will be redirected to the options menu.



Press F1/C two additional times to return to the start up window.

I. Duress Options

The US700 provides users a duress (“manual alarm”) button.
If a user registered a duress finger, a manual alarm can be triggered when recognized by the US700.

Note: the duress finger does not open the door, it only triggers an alarm.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
   User Manage
► Options
   PenDrive Mng
```

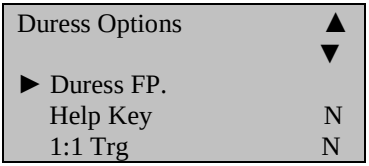
The options menu will appear.

```
Options                 ▼
   Comm Opt
   Log Opt
► Access Options
```

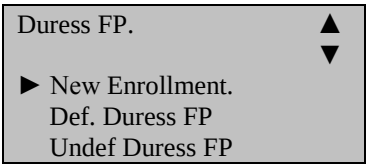
Place the cursor (►) beside access options and press OK. The access options menu will appear.

```
Access Options          ▲
                        ▼
   DSen. Mode        NONE
   DSen. Alarm         30
► Duress Options
```

Place the cursor (►) beside duress options and press OK. The duress options menu will appear.



Place the cursor (►) beside duress FP and press OK. The duress fp menu will appear.

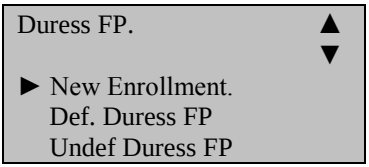


You have the following choices:

New Enrollment
adding a duress fingerprint to an existing user

Define Duress Fingerprint
Adding duress to an existing user already-enrolled fingerprint.

Undefine Duress Fingerprint
removing duress from an existing user's enrolled fingerprint. This will not delete the fingerprint but the fingerprint will no longer have duress status.



New Enrollment

If you are adding a duress fingerprint, select new enrollment and press OK.

Define Duress Fingerprint

If you are adding/defining duress to an existing user's fingerprint, select def duress FP and press OK. Then indicate which user ID you will be adding duress to and press OK.

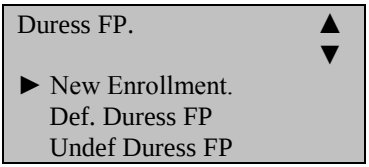
Next indicate which finger will receive duress status by pressing OK or F1/C as you scroll through the user's fingerprints.

Undefine Duress Fingerprint

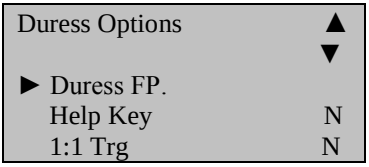
If you're removing duress from an existing user's fingerprint, select undef duress FP and press OK. Indicate which user ID you will be removing duress from and press OK.

Then indicate which finger will lose duress by pressing OK or F1/C as you scroll through the user's fingerprints.

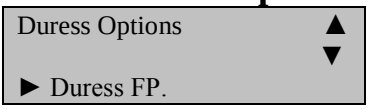
Press OK to confirm new changes or press F1/C to cancel changes. You will be redirected to the duress fp menu.

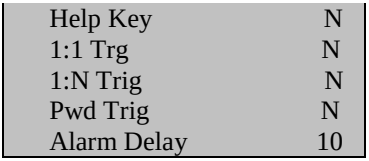


Press F1/C to return the duress options menu.



Other Duress Options



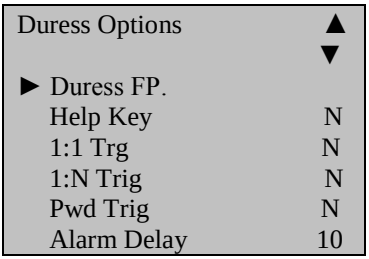


Note that you can indicate whether or not a duress alarm can be triggered.

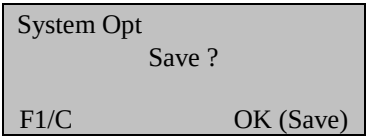
- A Help Key
- 1:1 fingerprint match
- 1:N Fingerprint match
- Password match

In addition, you can indicate how long to delay an alarm when a duress condition occurs.

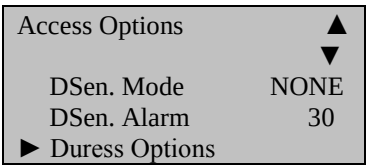
Use the scroll ▲/▼ keys and key pad to change values and when complete, press OK.



Press OK again then press F1/C to exit. You will be prompted to save your data.



Press OK to confirm changes or press F1/C to cancel changes. You will be redirected to the access options menu.



Press F1/C three additional times to return to the start up window.

XIII. Auto Test

This menu allows you to test various components of the US700.

Run ALL Tests

LCD Test
Does the display appear normal?

Voice Test
Scroll through and listen to pre-recorded voice prompts by pressing OK.

Fingerprint Reader
Does the display indicate the fingerprint reader is OK?

Key Test
Does each key pressed on the keypad correctly coincide with the key displayed on the screen?

Real Time Clock (RTC) Test
Does the display indicate the RTC is OK?

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside options and press OK.

```
Menu                    ▼
   User Manage
► Options
   PenDrive Mng
```

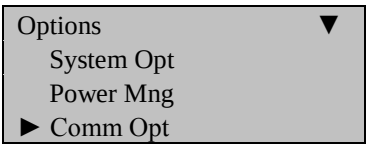
The options menu will appear.

```
Options                 ▲
                        ▼
   Log Opt
   Access Options
► Auto Test
```

Place the cursor (►) beside auto test and press OK. The following screen will appear.

```
Auto Test               ▼
► Run ALL Test
   LCD Test
   Voice Test
   FR Reader
   Key test
   RTC Test
```

Place the cursor (►) beside the feature you would like to test and press OK. After testing is complete, press F1/C and the options menu will reappear.



Press F1/C two additional times to return to the start up window.

XIV. PenDrive (Flash Drive) Management

This feature allows you to manually upload and download data (i.e. templates, attendance records/transaction logs and pictures/images) between the US700 and the USB PenDrive/flash drive.

Download Attlog/Record
Copies attendance records/audit logs from the US700 to the PenDrive.

Download User
Copies user's info (inc. templates) from the US700 to the PenDrive.

Upload User
Copies users' info from the PenDrive to the US700.

Press menu.

Use the scroll ▲/▼ keys and place the cursor (►) beside PenDrive Mng and press OK.

```
Menu                    ▼
   User Manage
   Options
► PenDrive Mng
```

The PenDrive Mng Menu will appear.

```
PenDrive Mng
► DwnLoad AttLog
   DwnLoad User
   Upload User
```

Place the cursor (►) beside the desired PenDrive option.

Press OK to proceed and the US700 will prompt you to plug in your USB PenDrive.

```
Plug Pen Drive?
```

Follow the prompts to upload/download data.

The following files are copied to the PenDrive:

- **X_attlog.dat** (attendance log)

- **X_oplog.dat** (management log)
- **X_user (**User info including templates**)**

Note:

The x represents the machine number of the US700 where the data originated.

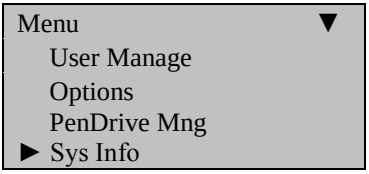
XV. System Information

This menu allows you to review various systems on the US700.

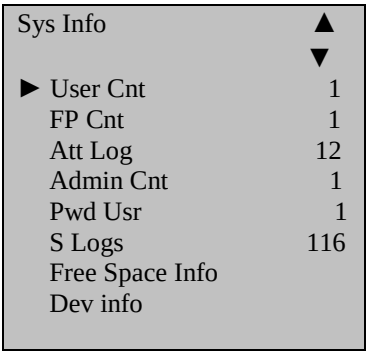
- Number of users enrolled
- Number of fingerprint(s)s enrolled
- Number of entries in the attendance/audit log
- Number of Administrators (inc Enrollers & Supervisors) enrolled
- Number of passwords enrolled
- Number of S Logs
- Amount of free space available.
    - Available fingerprint(s) entries
    - Available attendance log entries
    - Available S Log entries
- Device Info

Press menu.

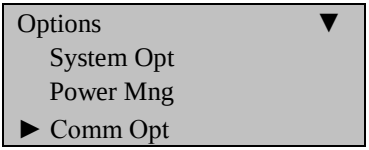
Use the scroll ▲/▼ keys and place the cursor (►) beside sys info and press OK.



The sys info menu will appear.



Use the scroll ▲/▼ keys and place the cursor (►) beside the system information you would like to review, and press OK. After reviewing, press F1/C to exit and the options menu will reappear.



Press F1/C two additional times to return to the start up window.

XVI. Maintenance

Cleaning

From time to time, the optical sensor, keypad and display window require cleaning. Since working environments differ, it is not possible to define when exactly cleaning should be performed.

Below is a suggested guide:

Item	Cleaning Frequency
Keypad and display window	Clean when visibly dirty and hard to read.
Optical platen	Do not over clean. The platen is designed to work under greasy or dirty conditions. However, do clean if the platen is obscured or if users report deteriorating performance. See cleaning the Optical Platen below.

To clean the keypad and display, use a soft paper tissue which should be slightly damp.

Cleaning the Optical Platen

- If dusty, blow air on the platen to clean any dust particles.
- If the sensor is greasy, wipe it with a mild window cleaner or other similar neutral detergent.

Warning: Do not use any other cleaner or the platen may be damaged. Be careful not to scratch the platen. Do not use any other cleaner or the platen may be damaged. Be careful not to scratch the platen.